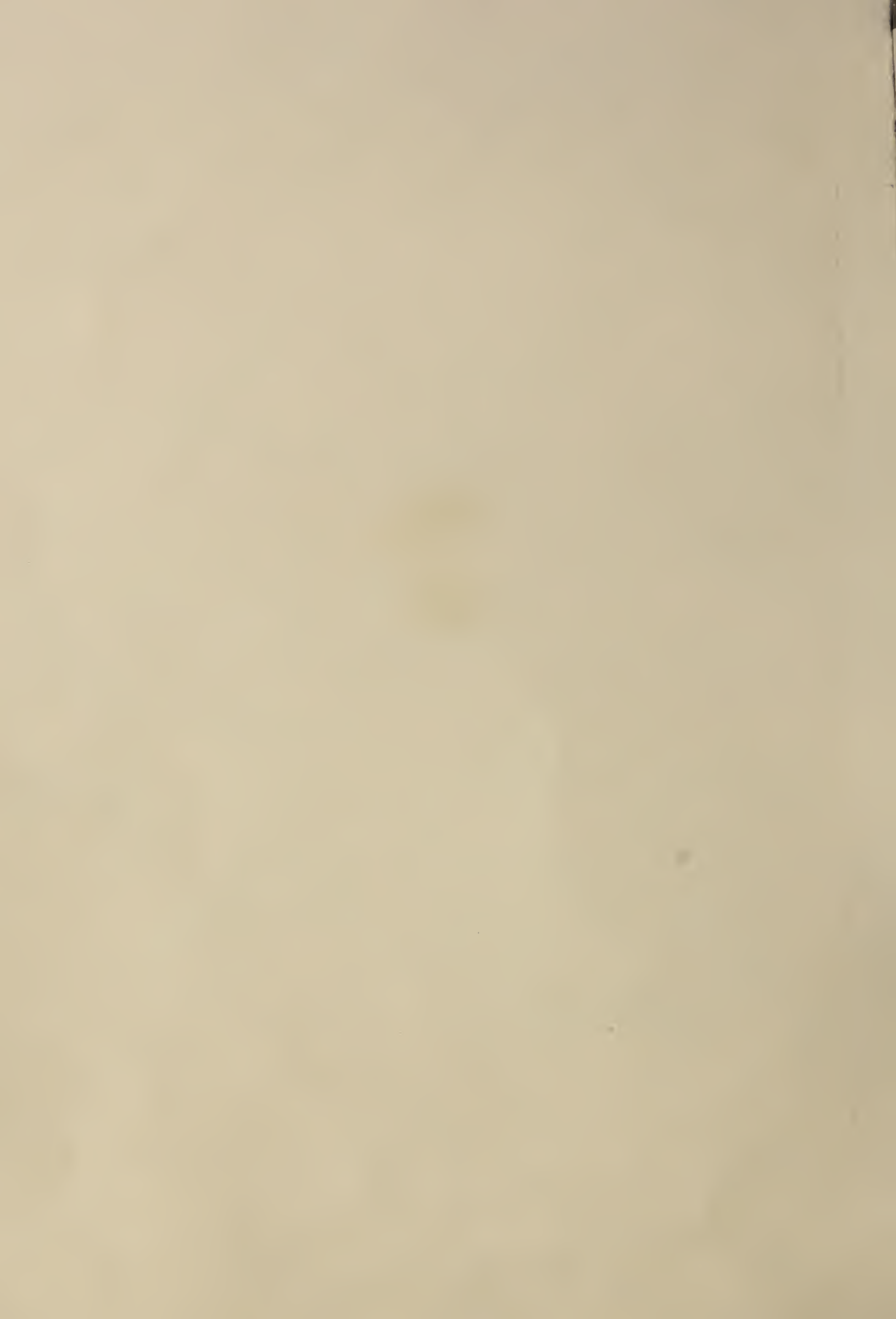


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Jefferson Seed Co.

formerly
Jefferson-Ratekin Seed Co.

36TH
YEAR

1920



THE KEY TO
THE HARVEST



MAGIC QUEEN
TOMATO

EARLIEST LARGE TOMATOES IN THE WORLD
PACKET 10¢, OUNCE 60¢, ¼ lb. \$1.75, lb. \$6.00 POSTPAID

Jefferson, Iowa

Jefferson's Ever Blooming Flower Seed Collection

One large 10c Package of each of these 8 choice
Flower Seeds for 50c postpaid



**GIANT
FLOWERING
NASTURTIUM**
Large Package 10c
3 for 25c Postpaid

**FINEST MIXED
SHOW PANSIES**
Large package 10c
3 for 25c Postpaid



ANTIRRHINUM OR SNAPDRAGON
Splendid spikes bloom all summer.
Ideal for bedding.
Large pkg. 10c, 3 for 25c Postpaid



CELOSIA OR COCKSCORN
Hardy Annual, very showy
Large package 10c
3 for 25c Postpaid



HELIOTROPE
Very fragrant, blooms all season.
Large pkg. 10c, 3 for 25c Postpaid



EARLY FLOWERING COSMOS
Blooms until frost.
Large pkg. 10c, 3 for 25c Postpaid



PHLOX DRUMMONDII
An all Summer-flowering
Annual; very brilliant.
Large package 10c
3 for 25c Postpaid



HYACINTH
Rapid growing, free flowering
annual climber.
Large pkg. 10c, 3 for 25c Postpaid



Every one of these men is working for you, putting forth his labor, time and money, to secure for you the very best to be had in the seed line. These men are just as interested in your success, the outcome of your crop as you are. A pleased customer is the greatest asset a business can have and our greatest ambition is to make you a pleased and permanent customer.

We guarantee a Square Deal to all.

Terms and General Information About Ordering



The attention of our customers is respectfully called to the following directions, which will, if followed, be an aid to the purchaser as well as ourselves.

Your Name and Address

We make this first suggestion, for it is very important that you sign your name and write your full address plainly on every order you send us. Orders often reach us where the address is omitted and very often the name and address are both lacking. This causes delay, for we cannot fill orders if we have not the address of the buyer. Give your postoffice address, name of county and state, and if articles are ordered that go by express or freight, give the railway station to which you wish the goods shipped. It is advisable to write your name the same way each time you write us.

CATALOGUE INDEX—To quickly find any article in this catalog refer to the index in back of book.

How to Make Out an Order

Select from this Seed Book the articles you desire and write your order plainly on our order sheet enclosed in this book. Read over your order and make sure that all is clear and complete. State clearly whether it is a packet, ounce or pound that is wanted. Look over the prices carefully to see if you have them correct.

Our Terms are Strictly Cash with Order

Every item entering into the Seed Business is spot cash. Cash buys the best of everything. When cost of seed, postage and other necessary expense is paid good, high-grade seeds are sold on a very small margin. It is not big profits on a single order, but the large volume of business we do that enables us to make you bargain prices and give you the most for your money. Our constant aim is to make highest quality the first consideration and, next, to put our prices as low as good seed can be sold.

Delivery

The point of delivery of all heavy goods is on cars at Jefferson, Iowa. When we quote a delivered price at your station it means we prepay the freight or express charges.

We **PAY THE POSTAGE** on all Vegetable and Flower seeds sold by packet, ounce or pound unless otherwise stated. If you wish large quantities of seeds sent by mail, add postage at parcel post rates given on Page 3. We can send 50 pounds of seed anywhere in the United States and 70 pounds in the 1st, 2nd, and 3rd zones.

Our Reliability

We take pleasure in referring you to The First National Bank, or any other Bank of this city, as well as the Postmaster, Sheriff, any citizen or Business House, as to our reputation for honesty and fair dealing.

Free Samples

We are always glad to send you free samples of Corn, Grasses or other Field Seeds for testing purposes. You are not imposing on our good nature when you ask for samples for we know the quality of our seed will bring us your big orders.

If you are contemplating a large Order, amounting to \$10.00 or more, make up your list on our order blank and send it in to us. We will go over your list and make a special flat price on the entire order. We have saved our customers hundreds of dollars in this manner. Our seeds are especially adapted to the market gardeners or large growers use, as they are grown under the most careful supervision from especially selected strains, and are rigorously tested for vitality. Their extremely high quality make profits certain.

Order Early

The best time to order is just as soon as you receive this catalogue, as we can always give your orders more of our personal attention if they come in before the rush of the spring.

What We Guarantee

We guarantee the safe delivery of all goods ordered from us whether by mail, express or freight. That all money sent to us for seeds shall reach us if sent by registered letter, postoffice or express money order or bank draft payable to our order, or your personal check, if you have the money back of it to make it good. Keep a copy of your order. Sometimes people think they have ordered articles which they have omitted, and blame us for not sending them. Please be careful to sign your name, postoffice, state and rural route plainly.

About Warranting

We thoroughly test all our seeds and nothing is sent out which we do not believe to be good, strong germination and that will grow under any reasonable conditions; still crops are contingent upon so many conditions, etc., over which we have no control, including soil, weather, time and manner of planting, cultivation, etc., that we cannot be responsible for the product and give no warranty, expressed or implied, as to description, quality, quantity or productiveness of any seed sent out by us, and every order for seeds named in this catalogue will be executed on these conditions only, and if the purchaser does not accept the seeds on these terms and conditions they are to be returned within 10 days. It however, must be plain to everyone who gives the matter the slightest thought, that it is to our best interest to send out only such seed stock as will not only grow, but prove true to the name and description.

Prepaid Stations

Many of our customers live at points known as prepaid stations, where there is no agent. In such case you should always send money enough to prepay freight charges through to such points, otherwise we will ship to nearest station where there is an agent.

Premiums

Each year we put up thousands of packets of new or particularly desirable varieties of seeds for free distribution to our customers. We will send these out with the seeds ordered by you and will treat you liberally in this respect. We but try to please our customers.

High Prices

Good seeds, like everything else, are high in price compared to what they were before the war. This is no fault of ours as we do not set the prices, but abide by the "powers that be"; however you may rest assured that prices given in this book are as low, if not lower than those of other seedsmen. It is our earnest endeavor to put before you, seed of high quality at prices consistent with your means. We want every one to grow our seeds. We invite comparison of our prices with those quoted elsewhere. Crop failures cause prices to fluctuate from time to time. For this reason we are not attaching prices of Farm Seed in quantities, but will issue a pink price list at regular intervals. Should you hold your order until later, please write us for price list, or in case you do not care to wait for price list, send in your order at prices given on the list you have. If prices have changed we will use our judgment as to whether to send you more or less seeds. In case the difference is considerable, we will write you promptly. In all cases you will get the full value of your money.

SEEDS BY PARCEL POST

We pay the parcel post charges on all seeds listed in this catalog up to three pounds weight. Customers wishing over three pounds sent by parcel post must pay the postage charge for all weight over three pounds. Many of our customers prefer to have their seeds come by parcel post instead of express. There is not much difference in the cost of transportation and parcel post is delivered to your door or mail box, but if you want seeds to come by mail you must send the postage, as it must be prepaid. The following table is arranged for the convenience of our customers who desire to have large quantities of seeds come by parcel post. The only thing to remember aside from the table is to add one pound over the actual weight amount of seeds you order to cover the weight of packing. Remember, that you have three pounds free weight. For example, if you live in Arkansas and wish to order five pounds of seeds by parcel post, you will add extra money to the cost of the seed, to pay postage charges on two pounds only which, according to the table at 4c per pound, will be 8c. We always pay postage on three pounds ourselves. No matter where you live, deduct postage for three pounds and send us postage to cover balance at the table rate if you want your seeds by parcel post.

If the postage you send is more than is necessary, the balance will be returned to you enclosed in a small envelope within the package. If you do not send postage for amounts over three pounds, we will take it for granted you wish the seeds sent by express or freight. Large orders will always be sent by freight unless we are otherwise instructed.

Please bear in mind that we pay the postage on all packets, ounce, fourth-pound, half-pound, and pound quantities of Vegetable, Flower, Seed Corn, and Farm seed up to three pounds as listed in this catalog.

INSURED PARCEL POST

Packages up to \$25.00 in value will be insured for their full value on payment of a fee of 5 cents for each package in addition to the regular post rates. Packages in value over \$25.00 will be insured for their full value, but not to exceed \$50.00 for a fee of 10 cents for each package in addition to the regular Parcel Post rates. If you desire your package insured, send the insurance fee in addition to the amount you send to pay for the goods—and be sure to mention same on your order.

PARCEL POST TABLE

STATE	Postage Per Lb.	STATE	Postage Per Lb.
Alabama	6 cents	Montana	8 cents
Arizona	8 cents	Nebraska	4 cents
Arkansas	4 cents	Nevada	8 cents
California	10 cents	New Hampshire	8 cents
Colorado	6 cents	New Jersey	8 cents
Connecticut	8 cents	New Mexico	8 cents
Delaware	6 cents	New York	8 cents
Dist. Columbia	6 cents	North Carolina	8 cents
Florida	8 cents	Ohio	6 cents
Georgia	6 cents	Oklahoma	4 cents
Iowa	1 cent	Oregon	10 cents
Idaho	8 cents	Pennsylvania	6 cents
Illinois	4 cents	Rhode Island	8 cents
Indiana	4 cents	South Carolina	6 cents
Kansas	4 cents	South Dakota	4 cents
Kentucky	6 cents	Tennessee	6 cents
Louisiana	6 cents	Texas	8 cents
Maine	8 cents	Utah	8 cents
Maryland	6 cents	Vermont	6 cents
Massachusetts	8 cents	Virginia	8 cents
Mexico	12 cents	Washington	10 cents
Michigan	4 cents	West Virginia	6 cents
Minnesota	4 cents	Wisconsin	4 cents
Mississippi	6 cents	Wyoming	6 cents
Missouri	4 cents		

PARCEL POST RATES ARE EASY TO UNDERSTAND, BUT IF IN DOUBT ASK YOUR POSTMASTER.

WEIGHT LIMIT.

We can now send packages of Seed weighing as much as seventy pounds to the first, second and third zones. Fifty pounds is the limit for the balance of the zones.

Chinese Cinnamon Vines

Cinnamon Vines—from the Oriental land are the most charming of climbers, and will quickly surround your arbor, windows and veranda with a wonderful profusion of lovely vines, covered with handsome, glossy heart-shaped leaves and sweet-scented flowers making them all

Perfect Bowers of Beauty

Perfectly Hardy, thriving everywhere in sun or shade, and once planted will grow a lifetime and be a constant delight to the whole family. They come from China—the land of wonders. No words can describe their beauty and marvelous sweet perfume.

It Always Pays to Make the Home Beautiful

No Home is complete without these wondrous vines. No one should miss this chance of planting them. They will grow 30 feet in a single season.

There is nothing will give a home a more homelike and cosy appearance, or be a surer index of refinement and culture than Beautiful Vines twining about the porch and trellises. Ornamental climbers are nature's drapery, and nothing produced by art, and few if any in nature can equal the Cinnamon Vine twining and climbing in its own native and graceful beauty.

— A FEW TESTIMONIALS —

L. and M. J. Clarkson, Authors of "Art Studies," Pleasant Valley, N. Y., writes:—To say that we were pleased with the Cinnamon Vine seems a feeble expression of our thanks. No vine ever gave us so much continued pleasure. The growth is truly phenomenal. Its handsome foliage and fragrant blossoms commend it to every lover of flowers. If its merits were more widely known you would be overwhelmed with orders.

W. E. Weeks, Barre, Mass., writes:—I enclose order for 100 more Cinnamon Vines. I sold the last package in less than fifteen minutes.

From Bessie L. Putnam in Epitomist. The Cinnamon Vine rivalled in growth the famous bean-stalk and when in bloom, as ours was for weeks last season, one might almost believe that the spiceladen odors of its native Philippines had been transported with it so aromatic is its fragrance.

We offer you genuine Headquarters Stock direct from the largest grower of Cinnamon Vines in the world, as follows:

PRICE: Postpaid, 1 selected tuber, 10c; 3 selected tubers, 25c; 8 for 50c; 20 for \$1.00. Order at once. Roots will keep perfectly. Plant any time from earliest spring up to July 15th. All orders will be mailed promptly.





What Others Say About Our Seeds

The following letters are only an index of the many hundreds we have received during the past season, every one of which we would gladly reproduce if space would permit.

Yutan Neb., April 25, 1919.

Gentlemen:—I received my order for five bushels of Queen of Nishna Seed Corn all O. K., and am well pleased with it. The corn is much better than some received by my neighbors who paid more money for theirs from other seed houses.

Frank Hollst.

Montello, Mass., Feb. 17, 1919.

Gentlemen: For some reason I have not received my seed catalog. I want to order some more Diamond Joe Big Early White Corn this year. After winning the state prize with Diamond Joe Big White for two years, I decided to try for it again last year with your Bloody Butcher. I will tell you what happened. The state officials came out to look over the field and they selected a number of rows, giving me instructions to pick the corn and they would come back the following Tuesday and weigh it up. On Sunday night a thief went into the field and picked most of the best ears and carried them away with him. I got a clue and gave it to the police and they convicted him and I got \$30 damages, but lost the prize. The official said I was easily sure of first prize, so you see I lost the prize of \$100 and you lost the honor of supplying the first prize seed. We will hope for better success the coming year.

A. Webster Butler.

Florenville, La., June 16, 1919.

Dear Sirs:—I am sending a small order today and hope to get the same results as my Spring order. But what I want to say is, the Magi-Queen Tomatoes I got from you are the most wonderful Tomato I ever planted. Notwithstanding all the rain we have been having, the bushes are something beautiful with their fruit. The smallest, which are very few, are as large as a golf ball, the larger ones weigh from one pound, six ounces, down to one-half pound. I do not think you are giving the Magi-Queen the advertising it deserves in your catalog. I have the Stone Tomato, also the Gardeners Favorite alongside of the Magi-Queen, but there is no comparison. The Stone blighted and rots on the flower end, a southern complaint, and the Gardeners Favorite is only a joke alongside of the Magi-Queen. The Golden Wax Beans and New Wonder Peas I got from you brought me nothing but more orders and compliments from my customers. I hope I will always get the same results from the seed I get from The Jefferson Seed Co. in the future, but tell the people more about the Magi-Queen Tomato so they can make a success with the finest and best Tomato in the world. Please send some more order blanks with my small order.

J. C. Leininger, Mgr., Stimpson Farm.

Kirkville, N. Y., Sept. 19, 1919.

Dear Sirs:—I am writing to tell you what a wonder the corn is we ordered from you. It is 12 feet tall, lots of it, and we planted it the 15th of June, rather late, but it eared real good, and is pure white. It is a wonder of all who see it, but I can't remember the name of it. Can you find it, I mean my order on your books, so we will know just what to order next year. Some say it is the regular silo corn, but I don't think it is. I think it is a field corn. Now if you can tell me, I would be glad.

Yours respectfully,

Mrs. David Gilmour.

Mouth of Wilson, Va., December 9, 1918.

Gentlemen:—I received your letter offering to send me special prices on grass seed. I can't order before January now, but please send me your catalog and special price list by that time. The Grass Seed I ordered from you last year was the best I ever bought.

S. J. Stump.

Lynville, Tenn., April 4, 1919.

Dear Sirs:—I am sending you my order for seed. I have grown your Magi-Queen Tomatoes for several years and find them the best of all tomatoes grown. Last year I raised the finest I ever saw. I canned over one hundred cans and sold lots of the tomatoes. I send to you for all of my seed. Your seed are not only first class, but you are reliable and it is a pleasure to do business with you.

Mattie Porter.

X-Ray, N. Mexico, April 19, 1919.

Dear Sirs:—I received my Seed Potatoes yesterday. They are certainly fine ones and are in good shape. I also received the pumpkin seed several days ago. I want to thank you for the promptness with which you handled the order.

Mrs. Nellie Shofner.

Shenandoah, Iowa, April 21, 1919.

Gentlemen:—I received my Clover Seed some time ago and am more than pleased with it. In the first place it was much better looking seed than I expected to get, especially this year. There were several of my neighbors with me when I got it from the depot and all said it was the finest clover seed they ever saw regardless of the year. It looked so good, that I sent in a small sample to be tested, just for fun. You may imagine my surprise when the report came back that the seed showed a purity of 99.85, germination, 99.50. I consider the \$165.00 sent you well invested. My garden seeds are all planted and everything up in good shape. Your seeds are all right and I will, hereafter, take pleasure in recommending them.

J. W. Wilfong.

St. Charles, Ill., May 12, 1919.

Gentlemen:—Please ship five bushel of Iowa Gold Mine Seed Corn to Geo. Curtis, of McHenry, Ill. He is on my farm at that place. I enclose you check at the same price I paid you for the ten bushel here I got from you a short time ago and which is sure fine seed. Send the same seed to Mr. Curtis and oblige.

Murray D. Aiken,
Dealer in Live Stock.
Holsteins and Guernseys a Specialty.

Spooner, Wis., June 5, 1919.

Gentlemen:—Please find enclosed Money Order for which send me some more of your Yellow Flint Seed Corn. The first corn I got grew fine, but the cut worms got the most of it. They are a fright here this spring. Ship me the same seed as before and oblige.

Henry Sakin.

Mason, Ark., April 19, 1919.

Dear Sirs:—I received my Diamond Joe corn yesterday and am sure pleased with it. It is the corn I have been hunting for three years. Please send me your grass seed prices.

Al Hamaker.

Rippey, Iowa, April 25, 1919.

Gentlemen:—Please send me your price list of your Canna and Dahlia bulbs. And do you have Salvia plants for sale? I want to send an order and do not know the prices of them. Your Garden Seeds were fine. All of them grew.

Bertha Beaman.

Tonganoxie, Kans., Feb. 17, 1919.

Gentlemen:—I received the Seed Corn in first-class condition and will test same and hope I will grow a good crop. I want to thank you for your prompt attention and business-like way of handling my order.

John V. Herrmann.

Erie, Ill., March 5, 1919.

Gentlemen: Enclosed find personal check for Reid's Yellow Dent Seed Corn. Please send it by express as soon as possible, so I will have time to test it before planting. I purchased seed corn of your firm last year and it grew good and was the best corn I ever raised. It averaged seventy bushels per acre and the men who shelled it said it was the best corn they ever shelled.

Jesse Naftager.

Bloomington, Ind., April 8, 1919.

Gentlemen:—In the fall of 1917, I purchased 160 bushels of Seed Wheat from you. The first year we got an average of twenty-two bushels per acre. Last year the same wheat averaged thirty-one and one-half bushels per acre.

J. D. Showers, Pres.,
Citizens Loan & Trust Co.

Bartelo, Ill., April 23, 1919.

Dear Sirs:—The Seed Corn you sold to Mr. C. J. Bretz looked so good, I want some of it. Enclosed find my check for which send me, by express, two bushels of Reid's Yellow Dent, the same as Mr. Bretz got of you.

Christian Falbe.



King Corn.

CORN is indeed King. It is the greatest money crop the world has ever known. The United States not only leads all other countries, but produces three-fourths of all the corn that is grown in all parts of the world combined. The government average estimate of the corn crop is around two billion, seven hundred million bushels. IOWA leads with an average of three hundred eighty million bushels.

CORN employs more people and contributes more to the wealth of this country than any other cereal—more than Cotton, Wheat and Oats combined. To haul Iowa's vast average corn crop to market would require 880,000 freight cars, each 40 feet long and holding 1,000 bushels. There are 132 cars in a train a mile long, therefore it would take a train of cars 2,950 miles long to haul the corn grown in Iowa. That would mean a train extending from Cleveland, Ohio, to San Francisco. It would take 7,780,000 wagons, each holding fifty bushels, to deliver this corn to the grain elevators. If each team and wagon occupied twenty feet of space, it would make a train of vehicles 29,474 miles long. It is about 25,000 miles around the world, therefore this wagon train would encircle the world ONE TIME with 4,000 miles left over. These facts give us some idea of the wonderful yield of corn normally produced in Iowa.

Corn Growing.

To increase the corn crop is to increase prosperity all along the line. To improve it is to contribute to the general welfare. With good soil and proper weather conditions the essentials of corn growing may be considered under these heads: "Selection and Care of Seed," "Preparation of the Seed Bed," "Cultivation of the Growing Crop."

These were the essentials in Puritan times. They are the essentials today. The difference lies in the application. Some yet believe that any seed is good enough, that any sort of a seed bed will do and that any kind of cultivation will answer. Landseer, the great English painter, on being asked, "How do you mix your paints so true to nature?" replied, "With brains, sir." The successful farmers of today are applying the same rule to corn growing. With brains and improved methods they are doing the right thing at the right time in the right way and these things spell SUCCESS.

That the best crops are grown from the best seed, everyone believes. Yet how indifferent in practice are some of us to the necessity of securing the best seed corn for our own use, an indifference that is probably the most costly of all our faults.

It is a common thing to see a hill of corn producing a splendid ear, a scrub and a nubbin. Why this difference? Each stock had the same care, the same soil, the same sunshine. Why were they not all splendid ears? We must look to the seed for the answer. Seek the parents of the three kernels planted and the cause of the wide difference will appear. The seed is but the female part. Common field gathered corn contains many kernels fertilized by the pollen of scrub stock. These will as surely reproduce themselves as worthless animals beget their own kind. We might as well expect to get a fresh colt from a scrub sire as to get perfect seed corn, when no attention is paid to the kind of stalks furnishing the pollen that fertilizes the seed.

Some ears will produce a yield of 100 bushels per acre, others only 20 bushels. Some ears will produce many barren stalks, others none. Some show a greater tendency to throw out suckers than others. Crossing these worthless strains with the first, as is true of most field gathered seed, cannot produce the best seed corn. It may be good—good enough for some people—but it is not the best, AND IT ALWAYS PAYS TO PLANT THE BEST.

Why It Pays To Plant Thorough-Bred Seed Corn.

Prof. F. G. Holden, formerly of the Iowa State Agricultural College at Ames, now Agricultural Commissioner with the International Harvester Company of America, recognized as one of the leading authorities on corn, says: "I went into the cornfields of one hundred farmers in Story county, Iowa, where the State Agricultural College is located, and where the farmers were in their fields planting corn, and took a quantity of seed corn such as they were planting, from one hundred different corn planter boxes, and took it to the grounds of the State Experiment Station, and planted it on our trial grounds. Some of it made only twenty bushels, while other lots yielded almost one hundred bushels per acre. This wide difference was all in the seed and varieties. The land, cultivation and other methods all being identically alike. The expense of growing was the same. The BEST SEED and varieties produced fully FOUR TIMES AS MUCH CORN of better quality than did the other lots of INFERIOR SEED."

REMEMBER, IN COUNTING THE COST OF SEED CORN, one bushel of corn will plant seven or eight acres! The cost per acre of our pure-bred varieties is but 50 to 60 cents per acre. Only one bushel per acre increased yield more than pays all cost of the seed. The commonest mongrel scrub corn costs you something. The corn we grow and sell you is not only selected seed, but is pure-bred, has been carefully handled, dried and cured as seed corn should be, and will grow and give you a yield of 10 to 40 bushels per acre more than ordinary varieties. This is no idle boast. Our seed is doing this for thousands of wide-awake, up-to-date farmers.

A bushel of seed corn that increases your yield ten bushels per acre makes you at the rate of \$60 to \$80 per bushel. Hence, don't overlook that if you plant seed that lowers your yield this much or more, it has cost you at least \$50 per bushel in the result of your crop. This is why it pays to plant only the very best seed corn available anywhere, regardless of price.



What Is Good Seed Corn? Breeding. Growing. Handling.

TO BE FIRST CLASS SEED CORN it should be of a standard variety of superior quality in yield, of early and sound maturity, corn that has demonstrated its ability to outyield other strains of the same variety. It must show a high percentage of germination, thus insuring an even and perfect stand. It can only be secured from a practical and scientific corn breeder, one who possesses a knowledge and experience in the growing, breeding and judging, as well as the preparation of seed in all its details.

Correct Breeding of Seed Corn.

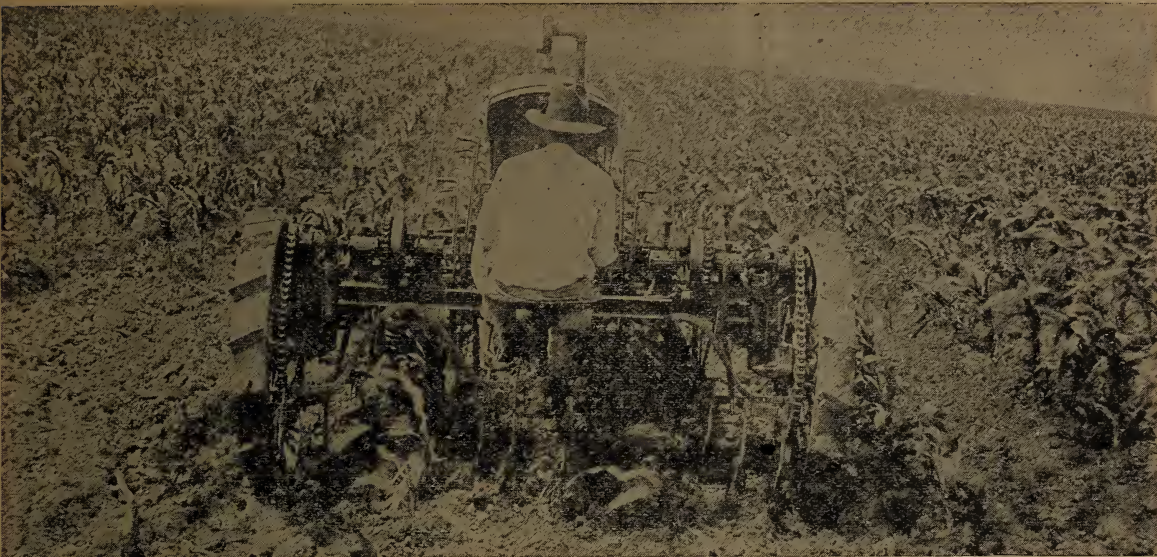
We realize that by far the most important question that presents itself and comes before the farmer each year is his SEED CORN. Since we blazed the way, in the improvement and breeding of corn for seed, and actually grow and sell more seed corn, perhaps, than any five seed corn growers or seed houses combined in the state of Iowa, we feel it proper to present at this time in our thirty-sixth annual catalog, a summary of what we have accomplished along the lines of scientific corn breeding and improvement. Years ago we adopted and established BREEDING PLOTS from which to grow our seed stock, at that time for the sole purpose of improving and increasing our yields from the best and most select ears. Later we adopted EAR ROW TEST PLOTS.

What The Ear—Two Row Method Reveals.

No two ears of corn are exactly alike, yet it is found that within varieties there exist certain strains or families. Breeding corn is simply carrying out Nature's own methods, but in addition one must keep a record of each individual plant or set of plants resulting from certain ears. By selection we are enabled to increase certain desirable qualities and thus we bring about the tendency of each succeeding generation to become more uniform and fixed in its certainty to reproduce these qualities.

On planting the kernels of corn from a given mother ear in a single row, that row of progeny will invariably have a certain degree of individuality throughout the season and show a contrast with other rows similarly planted. It may be that this particular row will germinate almost perfectly, outgrow neighboring rows completely and at gathering time have ears of uniform size and few nubbins, outyielding all others in the field. Yet the selection of the original ears for planting may have been made with the greatest care to have them all as nearly uniform as possible. The treatment through the season for each row may be identically the same and the chances for any variation in fertility of the soil reduced to the minimum. The very next row of this vigorous and high-yielding row of corn may represent the opposite extreme and poor germination. Previous to the time of pollenization all tassels of weak and undesirable stalks are removed to prevent the pollen from the inferior stalks to fertilize the more vigorous plants. In this way, and only in this way, is it possible to obtain the best results in breeding corn for seed purposes.

The all-essential point in which the farmer is most interested, is to obtain MORE BUSHEL PER ACRE. The score card, the corn shows and the competitive corn judging are all good and have their places in awakening the interest to better and more profitable corn raising, but the commercial corn breeder should not allow himself to become too greatly absorbed in ideal ears, unless these can show for themselves by authenticated records prepotent powers of reproduction. This is something which does not occur in one out of a thousand trials. In our estimation "show corn" bears identically the same relation to the corn crop that four-leaf clovers bear to the clover crop. Larger yields, not show corn, is the result of scientific breeding.



CORN CULTIVATION

The Seed Bed Whether in the garden or in the field, the seed bed must be thoroughly prepared to produce the greatest yield. A "good enough" seed bed may do for some, but at the best it can only yield a fair crop. Too often it means a poor stand, an uneven growth and a foul field. No crop grown on the farm suffers more from being planted in a poorly prepared seed bed than does corn, and no crop is more responsive to the effects of a good seed bed than this king of farm crops.

Fall Plowing Fall plowing usually produces a better corn crop than Spring plowing, the ground being mellowed by the frost and rain. Then, too, it is more economical, for it can be done when both men and teams are not so busy, and one can plant on fall plowing earlier, a most important consideration.

Spring Plowing A good workman will leave his field as nearly level as possible. Spring plowing is often robbed of half its value by being left to dry and bake just as it is turned. The best farmers have learned that it is a much better plan to pulverize each half day's plowing before leaving the field. This leaves a level field, well-pulverized surface that absorbs the heat and retains the soil moisture.

Corn Cultivation The best method of corn cultivation is a question that has been much discussed during the past few years and while some corn growers strongly advocate shallow or surface cultivation, there are those that still adhere to deep plowing and ridging of the corn row. We, however, believe the different methods depend very much on weather conditions, wet or dry, but all agree upon the use of the harrow about the time or just before the corn begins to peep through the ground, after that at the first plowing and just when you can fairly see the rows, is to plow deep and as close to the corn as possible without covering it up, with bull tongue shovels on your cultivator, after which use a surface cultivator or six small shovel cultivators, scratching the top of the ground only two or three inches deep.

Corn has no tap root, but like grasses, sends out a multitude of long slender roots a few inches below the surface. These small tender roots are the sole support of the plant until the corn is "laid by." They must collect the food-bearing moisture from the soil and deliver it to the stalk. Any method of corn culture that injures, prunes or even disturbs these feeding roots, robs it of the necessary moisture, decreases the vitality of the plant, and lessens the yield.

Because the brace roots penetrate the soil to a depth of several feet, many think the feeding roots do also. No more mistaken impression could be had. An examination of corn roots in the field during the cultivating season will show that the feeding roots lie nearly parallel with the surface and but a few inches below it. The brace roots do not appear until the corn is laid by, hence no system of cultivation can help or harm them, but such is not the case with the feeding roots.

Any rational method of cultivating corn must be based primarily upon the three underlying principles: To kill the weeds, that the corn may not be robbed of its food and the necessary air and sunshine; to preserve the corn roots, that they may do their work of collecting plant food undisturbed; to prevent the evaporation of soil moisture, that the growing plant may always have plenty of food in liquid form near the surface, where it naturally seeks it.

Every tiller of the soil knows the necessity of observing the first and does his best to destroy the weeds. The man with the hoe is conceded by all to be the most thorough method of cultivating. He did not dig down and cut off the roots which extend in every direction, but cut off the weeds, killing them, and threw the fine dirt toward the hill. Thus the long fine roots were left to furnish the plant with nourishment, and the weeds, soil robbers, were destroyed.

How We Grow Seed Corn

The extent of our trade in Seed Corn has reached such enormous proportions that it may be of interest to those who purchase from us to know how large quantities of seed are scientifically produced. Our acreage is so large that it would be manifestly impossible for us to own and control all the land necessary. We make contracts with our farmer-stockholders and other reliable farmers, selecting those owning good farms which are properly handled; men who will work under our instructions, and pay them liberal premiums for the product of their crops, from seed furnished by us.

The ground must be properly prepared, must be plowed and harrowed as we instruct and the seed which we furnish planted in the proper manner. We do not grow different varieties of seed corn close together, but have our fields well scattered, thus avoiding liability of mixing by the wind carrying the pollen from one field to the other. The corn is frequently cultivated and as soon as the tassels appear, men sent into the fields to remove same from all barren stalks. This produces seed having a tendency to large yields and the production of ears on every stalk. This work also prevents a condition which is too often seen in a field of corn, that is, a hill with two or three non-productive stalks.

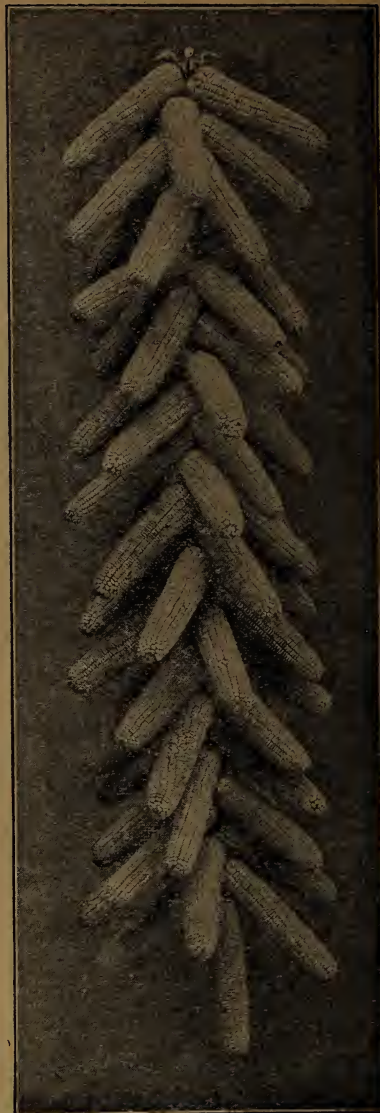
How Our Seed Is Handled

Our corn is always allowed to remain in the field on the stock as long as weather conditions will permit, in order that the ears may have the full benefit of Nature's process of drying, which is the best method for curing corn ever devised. But when the time comes for getting it into our houses, everything else is made secondary to that end and every bushel husked each day, goes into our corn houses before we sleep. As fast as it comes in, it is placed in flat bottom sorting tables, built especially for our purpose, so that every ear can be inspected. Here we have a small army of men, experts in the business, to go over it, sorting it out ear by ear, selecting only the well-developed and thoroughly matured ears, which are conveyed to our regular depositories. The refuse, culls, shelled corn, silks and husks stripped from the select ears are cleaned up, shelled and sold on the market. Thus we are able to economize space and use our storage rooms for choice ears only. Ordinarily we reserve from 25 to 40 per cent at the first sorting, but when the time comes for shelling and shipping out, usually commencing about January 1st, as we supply many of the leading seed houses and seedsmen of the country with their seed, WE AGAIN GO OVER EACH AND EVERY EAR THE SECOND TIME, RIGIDLY INSPECTING EACH AS TO VITALITY, the butt and tip ends being taken off before shelling.

Meantime our corn, before the second inspection and re-sorting, is kept on racks and hangers in our new up-to-date ventilated drying rooms. To clean and grade our seed, we have machinery built especially for this purpose,

and when we say we have the best and most complete equipment that money can buy or will be found in any seed house in America, we believe we are not overstating facts. After shelling all seed passes over our first cleaner or scalper, where it is cleaned and fanned. It is then conveyed to our new process cleaner and grader, which makes five different separations—extra large kernels, small undersized, extra thick, extra thin, and high, the

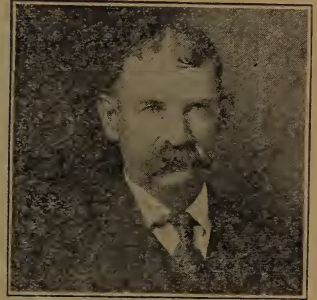
graded seed corn, similar to the sample sent you. We have been told hundreds of times that the way we clean and grade our seed corn, wheat, oats, barley, clovers, grasses and other seeds, alone makes it worth twice as much as the same quality of seeds cleaned on ordinary mills. After our seed is all graded, it is again given the germination and moisture tests, and when satisfactory is bagged and ready for shipment.



Formerly Jefferson-Ratekin Seed Co.

TESTED SEED CORN

Most everyone likes to see, or at least have a look at the men they deal with, so we are again presenting a likeness of our seed corn expert, Mr. C. E. Mackey, better known among our co-workers and employes as "Dad." "Dad" is one of those quiet, unpretentious fellows who doesn't believe in too much bluster and brag about his business, and says he is perfectly contented to keep up his splendid seed corn reputation without the pictures. We believe, however, it would be doing our customers an injustice not to show them a likeness of the man who takes care of their thousands of seed corn orders every year. "Dad" is one of the pioneer seed corn men of the great corn belt, and we trust nothing will prevent us from showing his likeness as our seed corn expert many years to come.



C. E. MACKEY.
Our Expert Corn Man.

A Lifetime Study of Corn

"Dad" Mackey has spent his entire life in the study of how to raise more and better corn, having been born on a farm in the famous "Heart of the Corn Belt," and the seed corn business to him is a science—not merely a daily routine. For more than forty years he has studied the corn business, and today ranks second to none, in fact hundreds of farmers who have met him personally and consulted him on corn growing, will tell you that he is the peer of any man in the Corn Belt States when it comes to giving advice about what varieties are best adapted to the different localities.

Mr. Mackey has a large force of men under his command, who thoroughly understand their work, and every bushel of Seed Corn has his personal O. K. before it leaves our house. He says, "Every order must be filled with good seed, like I myself would want to plant, or it doesn't get my O. K." We have sometimes thought he was a little too cranky about his orders, but if you could see the many people who come to him for advice, and read the thousands of letters we get from satisfied customers, you would agree with us that it is best to let him have his own way, so we have practically given him control of our Seed Corn department, and our customers may rest assured, that under his direction they will get prompt service and the best Seed Corn that the "Heart of the Corn Belt" can produce.

Green County Prize Winner

No. 302, Early Iowa Yellow Dent

NO. 302 EARLY IOWA DENT—This splendid early variety of corn has been thoroughly tested throughout the corn belt, and in every case has given great satisfaction. It is a product of the Agricultural College at Ames, and we can positively guarantee it to you as one of the best early yellow corns in existence today. We nearly lost our seed stock of this variety in 1917, but were fortunate in securing some of the pure stock left over from our 1916 crop, which we distributed among our growers and farmers here at home in the spring of 1918, and can now offer thousands of bushels of this splendid variety to our customers. It is one variety which will do well on any kind of land or in any latitude. It possesses the **BEAUTY** of REID'S YELLOW DENT, the **DEPTH** of IOWA GOLD MINE, and the **EARLY MATURITY** of PRIDE OF NORTH. In other words it combines all the virtues of any and all of the standard varieties of corn. It has been known to yield from 62 to 100 bushels per acre in our own county. We can cheerfully recommend it to you as the best all-around early corn we have ever grown.

DESCRIPTION—Stalks thick and heavy. Broad blades and leafy foliage, height from 7 to 9 feet, dependent upon the land—hill or bottom; ears run from 8 to 11 inches long, usually about 10 inches, 16 to 20 rows, deep grain solidly set on a small red cob; shells 88 to 90 per cent grain to 10 and 12 per cent cob, weighs out two or three bushels more per wagonload than other varieties, thus proving its soundness and maturity. It is one of the heaviest yielding grown varieties, and has a record of 80, 90 and 100 bushels per acre in almost every corn growing state where planted. We unhesitatingly recommend this variety anywhere, north, south, east, or west. In addition for fodder and ensilage purposes **THERE IS NO BETTER** and few, if any, that equals it.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25; postpaid.
See enclosed pink price list for peck and bushel prices.



Typical Ear No. 302
Green County Grand Prize Yellow Dent

Plant Dependable "Jefferson Brand" Seed Corn

PRIDE OF NISHNA--YELLOW DENT

Fifty Years of Scientific Breeding and
Improvement Behind this Corn



"PRIDE OF NISHNA"—YELLOW DENT CORN—THE CORN THAT MADE US FAMOUS.

We Believe "Pride of Nishna" Will Produce More Bushels Per Acre than any Yellow Corn the Farmer can Plant.

Pride of Nishna This grand variety of Yellow Dent Corn is one of the few varieties of field corn that has a history of fifty years of improvement behind it. It was the first seed corn planted by Mr. J. R. Ratekin after migrating from central western Illinois in 1867, sixty years ago. At that time "corn was just corn," same as it is yet, in some localities, but since then most all leading progressive farmers have come to realize that there is as much difference between thoroughbred and pony and Percheron or Clydesdale stallion. Mr. Ratekin, being an enthusiastic and strong believer in planting only the best improved varieties, began this improvement at the start, by careful selection of his seed from year to year—crossing and re-crossing varieties, and at the same time started a breeding plot in an isolated place, away from other corn, and by this process it was not many years until he had developed one of the early maturing varieties of corn that is today grown anywhere in the United States. It was after seventeen years of this kind of work that Mr. Ratekin engaged in the growing of seed corn for the commercial farm trade, and it was at this time that he named this grand improved variety of corn "PRIDE OF NISHNA," named for and after the Nishna Rotna River Valley, known far and wide as the best and most famous locality for growing corn and seed corn that can be found in the United States or anywhere in the world, as rich, bountiful and productive as the Valley of the Nile; just far enough north and far enough south to safely mature all the best standard field varieties as well as all the early and extra early sorts, and some of the later and largest varieties.

During the past thirty-five years we have sold no less than a million bushels of this variety for seed—over 75,000 bushels, wholesale and retail in 1917, making shipments to every state in the Union, including every county in Iowa, Illinois, Missouri, Indiana and Ohio, and every county in Nebraska and Kansas where corn is grown, and everywhere it has proven a tremendous yielder and top-notch, always maturing in 100 days in the north and 90 days in the southern states.

We can fully recommend this variety for any county in Iowa, Illinois, southern Wisconsin, Michigan and New York; also any part of Indiana, Ohio, Pennsylvania and West Virginia, and from there south to the coast. It is a splendid ensilage corn for states and localities located farther north than those mentioned.

DESCRIPTION—The stalks grow 8 to 12 feet high, dependent on the land—hill or bottom ground—stalks strong and robust, very leafy, broad blades and plenty of them, making an excellent fodder or ensilage corn. Roots almost equal to that of sorghum, always resisting wind and storm and standing up well. Ears uniform, in size and shape, cylindrical from butt to tip, running from 9 to 12 inches long and 7 to 8 inches in circumference, containing from 16 to 20 rows of deep kernels solidly set on a medium small red cob, shelling 86 to 88 per cent grains and often even more. A wagon load of this corn weighs out two to four bushels more than ordinary varieties, thus proving its solidity. It is golden yellow, and a big crib full of it is a beautiful sight to look at. Its potency or power to reproduce is so great that neither dry nor wet weather affects its growth and maturity, as they do many other sorts. By long and continued selection the barren stalks have been eliminated, which has materially increased its yielding qualities. It is the earliest maturing large-eared yellow corn known or grown, always making itself safely and soundly beyond danger of frost in from 90 to 100 days' good corn weather. Our word for it, it will please you in every respect.

Gentlemen: I want to tell you about the Pride of Nishna Corn I got from you last spring, and what it has done for me this season. As you are doubtless aware, the dry weather has taken most of the corn in this locality. However, Pride of Nishna has stood the drouth and my crop is now matured. Everybody says they have never seen such corn before. The spring was wet, and I planted my first planting the middle of June, the second the last of the month, and the third on July 11th. The first is now dry enough to grind like old corn. Some of my neighbors estimate the yield of my crop at 75 bushels per acre, where I heretofore got only 30 to 40 bushels. In short, I consider my crop from Pride of Nishna simply immense compared with crops from our native sorts.

Be sure and send me your 1920 Seed Catalog as soon as it is printed. I will want more of your seed another year.

Truly yours, J. M. SCOTT.

Ballard County, Ky.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.

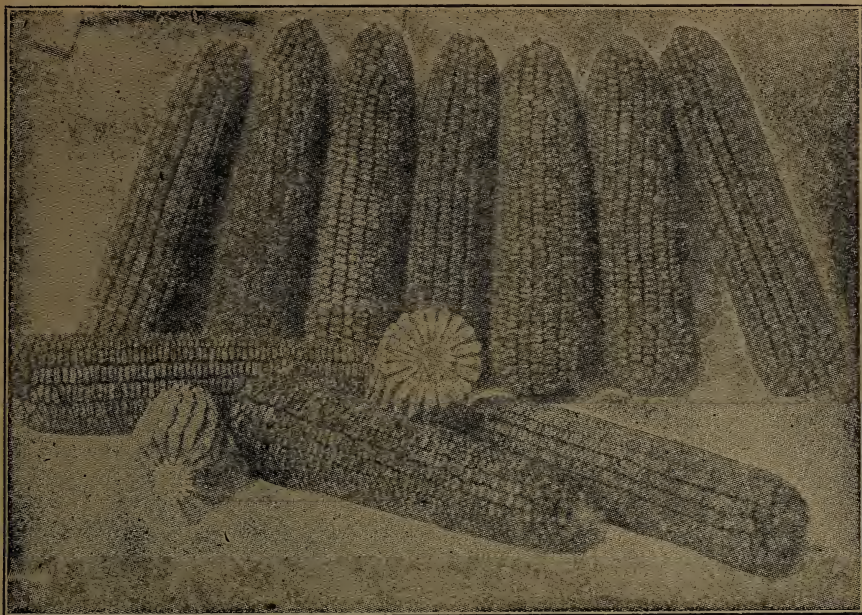
Formerly Jefferson-Ratekin Seed Co.

Mammoth Iowa Yellow Dent

FAMOUS FOR ITS UNIFORM LARGE EARS, HIGH YIELDING QUALITIES AND EARLY MATURITY.

Resists Drought and Scorching Hot Weather Better Than Any Other Variety of Yellow Dent Corn.

Mammoth
Early Iowa Yellow Dent
The World's Greatest



Yellow Dent Corn
Earliest to Mature and
Largest in Yield

Mammoth Early Iowa Yellow Dent 100 Day Corn

MAMMOTH EARLY IOWA YELLOW DENT is a variety of great merit, originated, introduced and named by us in 1911, and it has met with hearty favor wherever it has been tried and tested. Our description of **MAMMOTH IOWA YELLOW DENT CORN** consists of a bunch of eleven ears, including the one broken in two pieces, which will give a very accurate idea of the ears; stalks grow from 8 to 10 feet in height, dependent upon the land, upland or bottom, and is supported by a remarkable root system to support its large, strong, robust stalks, thus enabling it to resist heavy winds and not break over or blow down; ears run from 8 to 12 inches long, very symmetrical and containing 16 to 20 rows on a medium-sized cob; kernels of

more than average depth matures safely and soundly in about 100 days and is indeed properly named **MAMMOTH EARLY IOWA YELLOW DENT**. Beautiful in its rich, golden yellow color and even size from butt to tip of ear. Certain in its early, quick growth and maturity, and, all points considered, a splendid, large-eared, early maturing yellow corn, "up to date." We can fully recommend this splendid variety to our customers everywhere, and assure them that they will make no mistake in planting largely of it.

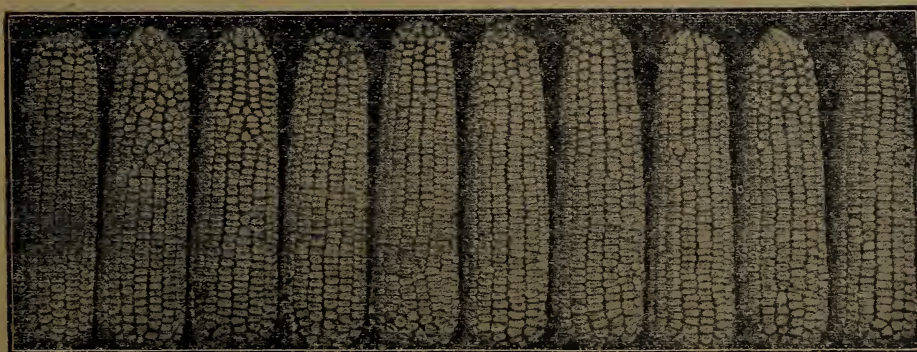
PRICE, postpaid: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25.

See enclosed pink price list for peck and bushel prices.

Pure Genuine Iowa Gold Mine

EARLY

The Best Medium Early; Between the Standard Field and Extra Early Sorts.



Iowa Gold Mine—Yellow as Gold Itself—Early Between Pride of North and Standard Sorts.

The Earliest to Mature; the Purest Yellow; the Deepest Grain; the Best Early; Standard Field Variety. This wonderful early variety of yellow corn has made the state of Iowa famous, as it is more widely known than any other variety grown and is planted in every state in the Union. Gold Mine is a favorite with every farmer who ever planted it. It matures in 80 to 90 days. Ears are medium in size, 8

to 10 inches long; color a bright golden yellow. It is free from barren stalks: every stalk bears one and two good ears.

PRICE, postpaid: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25.

See enclosed pink price list for peck and bushel prices.

Plant Dependable "Jefferson Brand" Seed Corn

The Most Popular Yellow Dent Corn
in the Great Central Corn Belt

Reid's Yellow Dent

Large Ears, High Yielding Qualities; and Early Maturity.



A Thoroughbred Yellow Dent

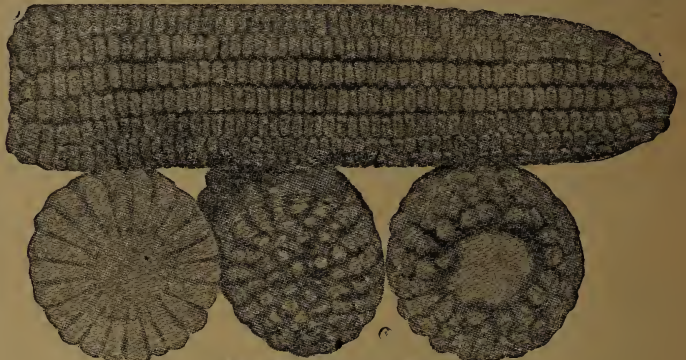


If any seed corn can be truly called pedigreed, Reid's Yellow Dent Field Corn is certainly entitled to be known as such, as its history dates many years back. It has been bred up and selected with painstaking care to what is at the present time one of the best varieties of yellow corn grown. Ear medium in size, remarkably uniform, and of a bright yellow color, with solid, deep grain and small red cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row, and is well filled over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with huskers. Best shredded sort, as it shatters the least of any by actual test.

In some of the principal corn growing states of the West it has no equal, and reports from many other states are very flattering. The Iowa Experiment Station report of 1910 gave the Reid's Yellow Dent an average of 100 bushels per acre, while the Agricultural Students' Union of Ohio in 1913 gave it a yield of 14 per cent above all other varieties. As a winner of prizes from the World's Fair at Chicago in 1893, and at western corn carnivals and shows down to the present time, it stands at the head.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.
See enclosed pink price list for peck and bushel prices.

Gold Standard—Early Leaming



Ears, Gold Standard Leaming.

The King of Cattle Corn

This corn was originated by Mr. J. S. Leaming in Ohio in 1826, and was introduced into this part of Iowa forty-five years ago, by pioneer settlers who came here from Ohio. Even at that early date, long before scientific corn breeding was talked of, it was noted for its uniformity and purity, also its distinct characteristics, and was extensively known by stock feeders. Since its first introduction many strains of Dent Corn have been started from this oldest known variety, but during all the years we have grown it we have adhered to and followed the original type started with, and by careful selection year after year, have greatly improved this excellent variety until it cannot be excelled.

GOLD STANDARD LEAMING is known as the **KING OF CATTLE FEEDERS' CORN**. There is none better—none yielding more bushels per acre. Being rich in protein and oil, it is ideal from a feeder's standpoint. In addition to its large grain yields it is grown extensively in the East, New England, New York, Pennsylvania and the Dakotas, for ensilage and fodder purposes of which it makes a wonderful supply of the best.

DESCRIPTION—Early Gold Standard Leaming is a pure and distinct variety of beautiful golden yellow. It grows a strong, rugged stalk 8 to 12 feet, dependent upon land, hill or bottom, very profuse, broad blades, making it one of the best ensilage and fodder varieties; ears contain 16 to 20 rows solidly set on small red cob, most stalks containing two ears, running from 8 to 10 and 12 inches long, usually about 10 inches; matures in 100 to 110 days good corn weather. We recommend this corn to farmers and feeders as a most excellent variety to plant.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.
See enclosed pink price list for peck and bushel prices.

Improved Pride of the North

This variety of early corn was originated by A. L. Goddard, of Kossuth county, Iowa (one of the extreme northern counties of Iowa) thirty years ago. It is a great favorite in the extreme northern states. A pure yellow dent, ears from seven to nine inches long with small cob and deep kernels, ears carrying from 14 to 18 rows. Will ripen and mature any place in from 80 to 90 days; can be planted as late as June 25th and make itself by September 15th. Good soil is capable of growing four to six stalks to the hill. Many stalks have two ears and usually produce from 30 to 40 bushels per acre.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.
See enclosed pink price list for peck and bushel prices.



PRIDE
OF THE
NORTH

Reid's Genuine Yellow Dent.

Formerly Jefferson-Ratekin Seed Co.

LEGAL TENDER

A Big Yellow Dent Corn

This is one of the best of large, medium late varieties. It is very productive corn where seasons will permit it of maturing, and it is no uncommon thing to find ears 12 inches long that will weigh from 1 to 1½ pounds each. The stalks grow 8 to 12 feet high, with very heavy foliage which makes it valuable for fodder and ensilage purposes as well as for the grain. Legal Tender has been a great premium taker, and to those who want a large, late variety of corn we can assure you that you will find it a splendid variety—one that will become a permanent fixture on your farm. Under favorable conditions this variety will mature in 120 to 130 days, and seems to be well adapted to any place or locality where the seasons are long enough for it to mature. Our seed stock of this variety is pure bred of inherited stock of choice quality and will give you the best results, and you can depend upon it.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

Improved Calico Corn

This corn is the old-fashioned kind, and always very popular as a feeding corn, and for many years we have had a great demand for it from stock feeders. No great has been the demand for this excellent feeding corn that we have given greater attention to it the past few years than in former years. Five years ago we found a superior type of this corn, grown by a leading corn breeder in Kentucky, from whom we obtained seed, which has proven a wonder, and without fear of contradiction we can say we have the highest and best strain of this corn that can be found anywhere. The strain is of the large-eared kind, deep grain and small cob, thus insuring early maturity. The ears run from 9 to 12 inches in length and measure 7 to 8 inches in circumference. It is full of protein and very rich; stock like it and eat it in preference to other corn. To all of those in want of one of the best corns for stock feeding, we can say we are in position to supply you with the very best of seed.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

Fodder or Ensilage Corn

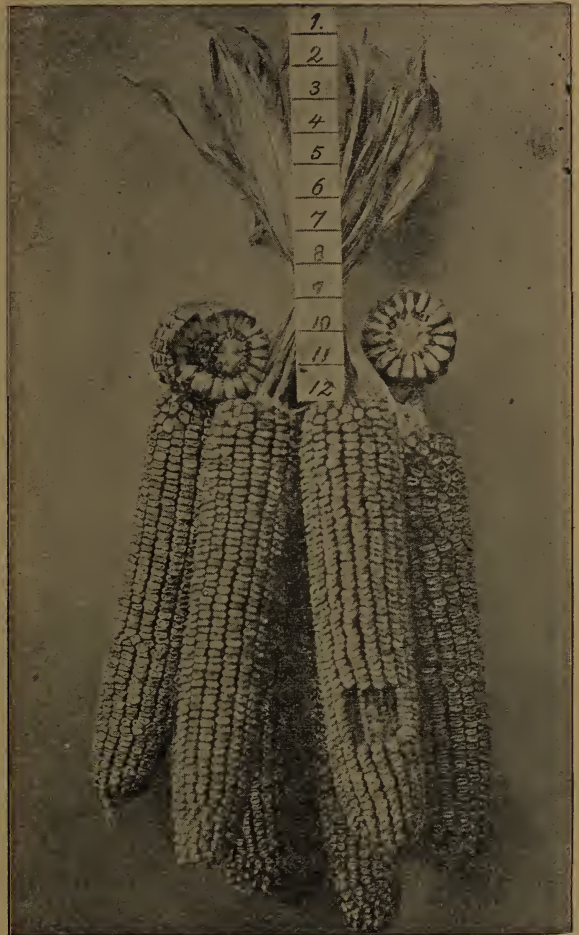
A great many dairy farmers and stockmen nowadays plant an early or some medium early standard variety of corn—that they can use for either fodder or ensilage purposes—corn which they can let stand near or until maturity and if they prefer same to be fed as bundle corn during fall and winter. By doing so they handle considerable less bulk, such as coarse stalks and a large amount of moisture, and provide a very nourishing and milk-producing feed in a more condensed form. That it is an advantage to plant earlier maturing varieties of fodder corn is now generally acknowledged. In fact there are many, very many, who prefer for fodder smaller growing corn than the large and later varieties, claiming for it the following advantages: First, that it matures earlier and gives well-formed and partially or fully ripened ears; that it is more easily cured; that the smaller stalks make finer and richer fodder. And we believe in this theory to a large measure—therefore, we want to especially recommend Gold Standard, Leaming, Pride of Nishna, Iowa Silver Mine, Imperial White, St. Charles White, Diamond Joe's Big White, Dakota Bloody Butcher (early) 85 days, Iowa Gold Mine, Queen of Nishna (early) 80 days.

Improved Stowell's Evergreen

If there is a variety of corn that is entitled to a whole page in this book, as a general utility crop, for the table, for canning purposes, for nutritious food for the human family and all kinds of stock, from the hog to the horse, to cut up and throw out to them during the latter part of the season when grass and clovers are dead or dried up, or to cut up for fodder for winter feed, it is Stowell's Evergreen Sweet Corn. It matters not what the cost of the seed, even at \$10 per bushel, it will pay every farmer to plant a few acres, enough to carry his stock, whether many or few, through the late summer and early fall months when pastures are dead or dried up. Yes; among all the splendid varieties it is a most excellent variety to cut and throw out to milk cows, horses, hogs and the colts and calves during the summer and fall months, when grass is dried up and pasturage short. As a green fodder fed in this way one acre will furnish as much feed as eight acres of grass. In addition, for fodder purposes we regard Stowell's Evergreen Sweet Corn as one of the most valuable grown, either for canning or for seed purposes, either of which makes it a desirable and profitable crop. There is no waste whatever in this corn.

Plant with drill in rows, 3 feet apart, eight to ten kernels to the foot in the row. Cultivate thoroughly, plowing deep and close to the corn the first time, after which cultivate shallow until three feet high. This variety of corn will make you from 15 to 30 tons to the acre.

PRICE: Ear, 35c; lb., 50c; 7 lbs., \$2.50, postpaid.
See enclosed pink price list for peck and bushel prices.



Giant Yellow Fodder Corn This is among the best big varieties for either fodder corn or to put up in the silo, or to cure and stack away, cropping as high as thirty-five tons to the acre.

PRICE: Ear 50c; lb., 35c; 7 lbs., \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

Big Southern Red Cob Fodder This is a standard southern variety which has made a wide reputation all over the country, and is noted for its splendid qualities for both fodder and ensilage purposes. It grows very tall, ranging from twelve to sixteen feet, and is a very leafy broad blade.

PRICE: Ear 50c; lb., 35c; 7 lbs., \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

Eureka Ensilage Corn Grows the tallest stalk and has the most leaves and blades and will produce more tons of material for the silo than any other variety. Stalks usually grow 10 to 14 feet high, containing 24 to 30 pairs of long broad blades; has made a record of over seventy tons on one acre of ground. Enough to feed ten head of cattle twelve months.

PRICE: Ear 50c; lb., 35c; 7 lbs., \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.



Diamond Joe's Big Early White Corn

Has Captivated the Entire Corn World The Earliest Maturing Big Eared White Corn Known or Grown

Has uniformly made heaviest yields everywhere, either white or yellow. It resists drought and hot winds better than any other known variety.

Diamond Joe This excellent variety of corn was originated and first introduced by us in 1905, and has been planted during this time in every section of the country where corn is grown, also in a number of foreign countries, and everywhere, north, south, east and west, it has proven itself one of the best, most wonderful in uniform large yields and early maturity that has ever been produced; in fact, it has a record of over 200 bushels of shelled corn per acre, ninety five days from time planted, and a record in hundreds of instances of 100 to 125 bushels and over per acre. We can fully recommend this splendid variety of corn to the farmers and corn growers, everywhere, as one of, if not the best, safest, surest to plant on either rich or poor soil; also as the heaviest in yield, either white or yellow.

Droughtproof In the great drought-stricken districts of Nebraska, Kansas, Missouri, Oklahoma, Arkansas, Texas and other localities, during the corn growing season of 1918, where we sold and shipped thousands of bushels of this seed corn, it withstood and resisted the drought, heat and hot winds better than any other variety, and in many places made yields of 30, 40, 50 and 60 bushels per acre where other sorts were almost or a total failure. This corn has made corresponding yields, everywhere, when seasons were good and were bad, and all who have been fortunate enough to plant it have won a prize by doubling their yields. In fact, it would make one gasp with astonishment to read the hundreds of letters and reports we have received from farmers who have planted and grown crops from this corn—many of them are almost unbelievable, but ran so uniformly alike they are indisputable.

Description The accompanying illustration is a true picture, from a photograph of this corn, showing its general type and character. From the name we gave this corn some people may draw the impression that it is a large jumbo-overgrown variety, but it is not. It, however, is a large-eared corn, running somewhat larger in size than Iowa Silver Mine. Every stalk produces one and two good ears, and this is where its large, heavy yield comes in. The stalks are large, strong and robust, growing to a height of 8 to 12 feet, dependent upon land, upland or bottom land, has a very heavy extensive root system and this is where its vitality to resist drought and hot weather comes in; the roots being almost equal to sorghum and Kafir corn. Medium ears run from 8, 10, 11 and some 12 inches long and over, but usually about 10 inches. 16 to 20 rows, deep kernels solidly set on cob of medium size. In short, this corn was bred with an eye single to heavy yields and early maturity and not for show purposes, but for all around general crop purposes. There is no variety that will do better or equal it on old, poor or hill ground, and at same time there is no variety grown that will yield more bushels of good sound corn on strong, rich corn land. It is the embodiment of all the good qualities contained in all the best varieties, it's the sure thing. Our seed stock of this corn is exceptionally fine this year (extra choice), absolutely pure and we hope to be able to fill every order that comes to us, large or small. If you are looking for the corn that will make you the most bushels and the most money, stop right now and order enough to plant your entire crop. It's the corn that will do it. Plant Diamond Joe on good land and do your part and it will make you 100 bushels per acre.

Points of Supremacy

1. It is a pure and distinct variety.
2. It is a strong, vigorous, robust grower from the start.
3. It is free from barren stalks, every stalk bearing one or more well-developed ears.
4. It is very easy to mature, making itself everywhere in 100 days or less.
5. It will thrive and do well in extreme dry weather and drought, when other varieties fail.
6. Diamond Joe is a superior variety of corn from every point of view and will make you the most bushels and the most money, wet or dry—any season. Order enough to plant your entire crop. We are sure this corn will not disappoint your best expectations.

PRICE: Ear, 50¢; lb., 50¢; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed plnk price list for peck and bushel price.



Diamond Joe's Big Early White.

Formerly Jefferson-Ratekin Seed Co.

Diamond Joe's Big Early White a Prize Winner

Wins Medal of Merit on Highest Yielding
and Best Dent Corn



Diamond Joe's White—The Greatest White Corn in the World.

He Planted Diamond Joe's Big Early White—Landed First Prize, \$100 in Gold

A Plymouth County, Massachusetts, man won medal of merit on Diamond Joe Corn at Panama-Pacific Exposition at San Francisco in 1915, for producing largest yield of dent corn per acre ever known in the New England states. Not only did this New England farmer win the prize at San Francisco, but has also entered four different exhibitions and contests on yields, open to all the New England states, in which he won first prize, for greatest yield, in each and every one, yielding above 130 bushels per acre.

Mr. A. Webster Butler, of Plymouth county, Mass., is an ambitious, up-to-date, progressive New England farmer as well as a firm believer in ideals. He first began purchasing his seeds ten years ago and has been a continuous customer each year from the first. Since he began planting our seeds he has won many notable premiums and prizes as will be seen from his letters.

Plymouth County, Mass., February 24th.

\$100 in Gold: 133 Bushels It may be of interest to you to know that I won first prize, \$100 in gold, at the corn show of all the New England states for production of the largest yield per acre of sound, well-matured Dent Corn. This prize was awarded me on my crop grown from the Diamond Joe's Big White Corn I got from you, and which made an average of 133 bushels shelled corn per acre on my farm in Plymouth County, Mass.

Very truly yours,

A. WEBSTER BUTLER.

Plymouth County, Mass., January 12th.

Gentlemen: I wish to extend to you my good wishes for a happy and prosperous New Year. I planted the seeds I ordered and received from you last year, with the best of results. I planted your Diamond Joe and from it filled a 76-ton silo. From my record of 1909 I grew 83 bushels of Flint corn to the acre, valued at \$1.00; 1910 I grew 133 bushels of Diamond Joe's Big White, valued at \$1.00 per bushel, and 1911, 133 1/4 bushels, valued at \$1.00, and in 1912 I obtained 381 bushels of Mangel Wurtzel beets from one-fourth acre. Again wishing you every good wish, I am,

Truly yours,
A. W. BUTLER.

207 Bushels Farmers and others have been attracted by the exhibition of corn that has been in the window at Dilleys store for some time. It was grown by J. W. Dale and two acres produced 207 bushels and 50 pounds, which is perhaps the

largest yield of corn ever known in this community. Mr. Dale says the moles took many of the seeds and but for this fact the yield would have been better. In gathering the corn great care was taken to keep the top and bottom ears, main crop, suckers ear and nubbins separate. The choicest of the main crop Mr. Dale will save for seed.

The corn is white, long, even ears, and is known as "Diamond Joe." Two hundred and fifty pounds of fertilizer was used to the acre. The ground was in good order for planting but no extra work was done in the way of cultivation.—Mitchell Tribune, Indiana.

89.6 Bushels It gives me pleasure to report the yield of seed corn donated by you last year as follows: The Diamond Joe's Big White yielded 89.6 bushels per acre; Queen of Nishna yielded 74.2 bushels. Both of these varieties of corn are good yielders here, yielding also a large quantity of fodder per acre.

Very truly,
J. C. HOGENSON, Agronomist.

HE PLANTED DIAMOND JOE'S BIG EARLY WHITE AGAIN AND LANDED FIRST PRIZE, \$100 IN GOLD.

Baltimore, Md., January 8th.

200 Bushels I have planted your seed corn since 1907, and I am now raising 200 bushels of corn per acre. Please send me your catalogue, so that I can select what seed I want for the coming season. Thanking you in advance for this favor, I am,

Truly yours,
JESSE DeHOFF.

Laflora County, Oklahoma, March 2d.

Enclosed find my order for seeds. I ordered seeds from you last year and got splendid results from everything. Among seeds ordered was some Diamond Joe's Big Early White Corn. I had faith in what you said of it. As a result it made a yield of over 50 bushels per acre, notwithstanding we had the most severe drought we ever had in this country, but it proved the best drought fighter I ever saw.

Truly yours,
JOHN SHACKELFORD.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.

Plant Dependable "Jefferson Brand" Seed Corn

Pure Genuine Iowa Silver Mine

Bred and Grown under Isolated Conditions
Especially for Seed Purposes

The Pure, Genuine Silver Mine Corn

Is one of the greatest yielding of all the white varieties. It is drought proof, of extreme vitality and does better on old, poor or hill land than any other variety. Early to mature, a big yielder and unexcelled for feeding, ensilage or fodder purposes. It is adapted to a wide range of conditions and is a great success in the north, south, east and west. It makes good where others fail and brings satisfaction to the farmer who plants it. Because of the great popularity of this corn thousands of bushels of white corn are offered and sold every year under the name of Iowa Silver Mine which bears no likeness to it. Our stock is pure.

DESCRIPTION—Stalk medium in height, ranging from 7 to 10 feet (dependent on the land, hill or bottom), very leafy broad blades; type of corn even and uniform; ears running from 9 to 12 inches in length; 16 to 20 rows pure white kernels solidly set on a medium small cob. Matures in from 90 to 100 days in good corn weather.

There is scarcely a township or neighborhood anywhere that corn is grown but what some of your neighbors can tell you about Iowa Silver Mine and the splendid results obtained from it. In view of this we do not deem it necessary, if space would permit, to print even a partial list of the thousands of testimonials we have received pertaining to this corn.

WE CANNOT TOO HIGHLY RECOMMEND THIS VARIETY.

PRICE: Ear, 50c, lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid. See enclosed pink price list for peck and bushel prices.



Johnson County White Single Ear Won \$1,000 in

This variety is a cross between Boone County White and Fayette Favorite and was developed by an Indiana farmer and has had 18 years of careful, painstaking and intelligent selection and breeding. While a late maturing variety, we are quite sure there is no better white corn grown today of greater merit or better suited to the central and southern corn belt. It has become somewhat famous for the large yields it has made in Missouri, Southern Illinois, Indiana and Ohio, and from there south, but is hardly early enough to be relied upon to always mature in Iowa, or north half of Illinois and that latitude.

The shape of the ear is cylindrical to within about 2 inches of the tip, then slightly tapering. Tips fill well over the end of the ears, the butts are well rounded out with a medium-sized shank, kernels uniform wedge shaped, pure white, and white cob; ears average about 10 inches in length, with the circumference about three-fourths the length.

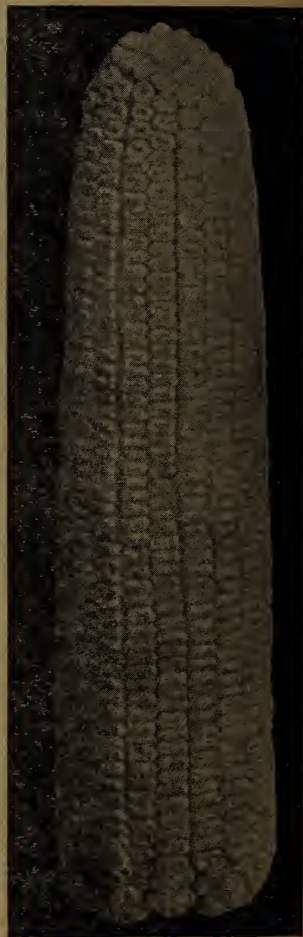
Of strong and vigorous growth and well covered with broad blades—very valuable for ensilage. The length of season is about 130 days. This corn has been successfully grown as far north as Des Moines, Iowa; Peoria, Ill.; Fort Wayne, Ind.; or Marion, Ohio. We recommend it for the great corn-growing districts of Springfield, Ill., Terre Haute, Ind., and corn-growing latitudes of the south.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre, \$2.25, postpaid.

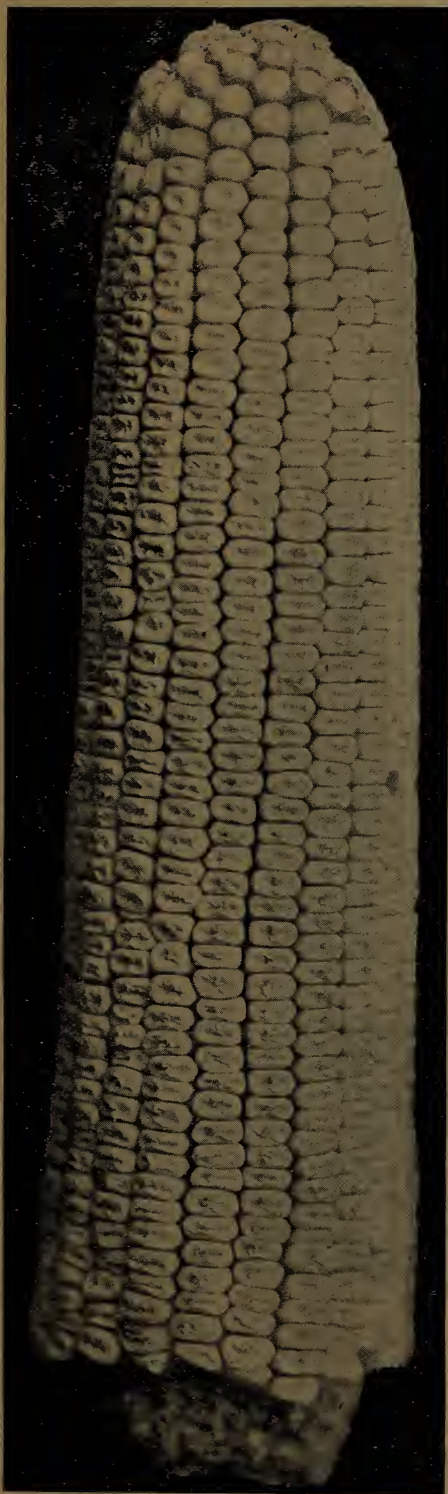
See enclosed pink price list for peck and bushel prices.

Iowa Silver Mine.

Our pure-bred Iowa Silver Mine Corn, best corn, most famous, more widely known and planted than any corn in the world; has greatest record of any corn on earth. It's an early maturing corn. It is a corn for the north, south, east and west; makes good where other sorts fail. It brings prosperity to the man who plants it.



Johnson County White.

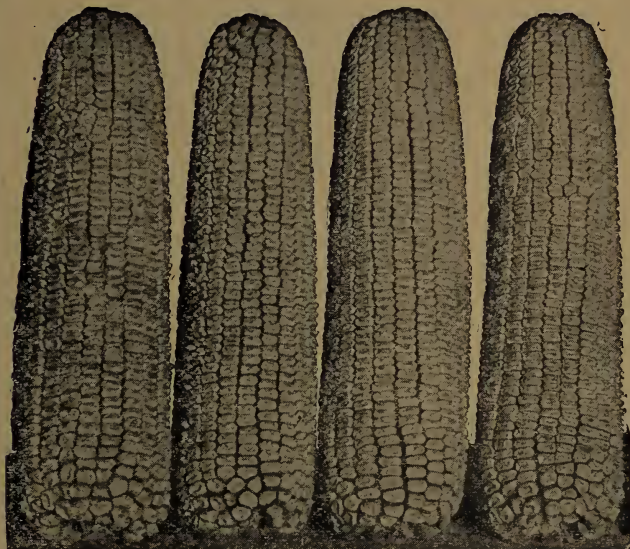


Saint Charles White.

Wallace's Favorite White We place this superior variety of corn before our customers for the twelfth year with renewed assurance that experience has demonstrated and proven it is one of the best, highest yielding varieties of all our introductions. While we do not claim it will make two, three or four hundred bushels per acre, we know it can be relied upon to yield as many bushels of good, sound corn per acre inside of 120 days as any variety to be found and if planted on good ground will yield from 90 to 100 bushels per acre, and even more under perfect conditions.

DESCRIPTION—The stalk is large, strong and robust, usually from 8 to 10 feet high, with long, broad leaves, extending from joints, which are close together and producing one and two good ears to the stalk, running from 8 to 12 inches long, with 16 to 20 rows of grains on white cob. Surely this corn will not disappoint your best expectations. Try it, no matter where you live—east, west, north or south. It is not only good for the grain it grows, but one of the best combination varieties for grain, fodder and ensilage purposes there is grown. It will please you.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid. See enclosed pink price list for peck and bushel prices.



Wallace's Favorite White.

Saint Charles White This excellent variety of white corn was originated in Saint Charles county, Missouri, and is very popular with many farmers who have grown it, and become wedded to it—plant it to the exclusion of other varieties. We can recommend it as one among the best standard sorts.

DESCRIPTION—Saint Charles White is a very handsome pure variety of white corn set on a red cob, ears usually 8 to 10 inches long, 16 to 18 rows of deep, broad kernels. Stalk grows from 8 to 10 feet high, dependent upon the land upon which it is planted, lowlands and bottom producing the taller stalks; the stalks growing broad, succulent blades, making it very desirable corn for general crop purposes for grain, fodder or for ensilage purposes. Our customers in east, west, central west and south for the grain crop, and in the east and north for ensilage and fodder.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50; postpaid. See enclosed pink price list for peck and bushel prices.

Boone County White This is a large white corn, perhaps the largest stock and largest eared field variety there is grown, either white or yellow, and is a great favorite with some of our customers where the seasons are long enough for it to mature, which requires from 130 to 140 days ordinary corn weather. The stalks grow from 9, 10 to 12 feet in height; ears from 9 to 12 inches in length; 16 to 22 rows deep grains on medium large cob; like all-white varieties, it does better on old or thin soil than yellow sorts, and gives corresponding yields on good, rich or bottom land. With favorable seasons, where it has plenty of time to mature, it is a valuable and very productive variety; say the states of Kansas, Missouri, southern half of Illinois, Indiana and from there south to the Gulf Coast states. Our seed stock of this variety is pure, and especially fine, well matured and can be relied upon to germinate and give a good or perfect stand under reasonable weather conditions.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.



Silver King

For Northern States



A SUPERIOR NINETY-DAY VARIETY SUITABLE FOR NORTHERN PLANTING.

Pedigreed Seed Corn, like pedigreed stock, must have a record behind them showing their ability to produce larger yields than other leading varieties under precisely the same conditions, also their vitality to resist extremes of seasons and weather to the utmost degree.

Silver King is an extra early white variety, and originated with Mr. A. L. Goddard, of Kossuth County (near the Minnesota line), who also originated Pride of the North more than thirty years ago.

Attention was first directed to Silver King through the efforts of Mr. H. J. Goddard, of Winneshiek County, Iowa, Winneshiek County being one of the extreme northern counties of Iowa (bordering on the state of Minnesota), who in his day ranked as the foremost corn breeder in Iowa. Its origin can be traced back to Indiana, for it was brought from that state to Fayette County, Iowa, in 1862. In 1869 Mr. Goddard secured a half bushel of this seed. The possibilities of developing a very superior type or variety of early corn from the stock so appealed to him that he continued to grow it, selecting each year the type of ear which came nearest his ideal. This has had much to do with the present uniform type of the corn. While he gave special attention to early maturity, at the same time he selected an ear of good size, deep kernels and comparatively small cob, with little space between the rows.

This corn has not been grown very much south of the north Iowa district, but it will make a good crop anywhere. Because of its extreme earliness it will be safe to plant in the North, where the larger later sorts will not mature sufficiently, and in the southern and central corn belt will be ready for feeding thirty days ahead of Reid's Dent or the large late varieties. Very popular wherever known.

Mr. Goddard gave it the name "Silver King," which is the proper designation. It has been tested and bred for a number of years by the Wisconsin Agricultural Experiment Station at Madison who disseminated it under the name "Wisconsin No. 7," and from this it became known among some of the seed trade as "Wisconsin

White Dent." It is, however, an Iowa corn, and we are offering it under the Iowa name, as our stock is produced in this state. By reason of the publicity given it by the Wisconsin station it has become the most popular variety in that state, and under the Wisconsin title has been disseminated in Minnesota and other portions of the northern corn belt.

Has yielded 93 bushels per acre with ordinary methods of cultivation. The record yield is 137 bushels per acre, produced in Wisconsin in 1913, in the acre contest for that year. In the same state, in the boys' acre contest, the record was 133 bushels per acre. Of course these were forced yields, but we believe on strong land with three stalks to the hill, a hundred bushels per acre can be harvested. There is no question about its yielding qualities.

Professor Moore, of the State Agricultural College of Wisconsin, who was instrumental in introducing this corn into Wisconsin, says: "In the first year of its introduction into this state, 1907, it made a yield of 98.6 bushels per acre on our experimental grounds, and an average yield for the whole state of 57 bushels per acre, as compared with 33 bushels, the average of all other varieties."

In Kossuth County, Iowa, Mr. Will Banks had much to do with the introduction of this corn in northern Iowa, exhibiting it and winning many prizes at county and state exhibitions. Space will not admit of hundreds of first premiums, prizes, sweepstakes and championships won on Silver King, but we cannot refrain from speaking of two boys in northern Iowa, who won over \$1,200 in prizes at exhibitions inside of five years after they began growing this corn.

DESCRIPTION: In appearance is a beauty. Ears averaging eight to ten inches, uniform in size and type, pure white in color, set compactly in straight rows, a strong grower, early enough to mature as far north as St. Paul, Minn.; has a decided double-ear characteristic, one reason for its fine yield records.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

Extra Early 90-Day Corn

Queen of Nishna

A Thoroughbred Yellow Dent Corn for Northern Latitudes or Late Planting



QUEEN OF NISHNA—THE EARLIEST, HARDEST, MOST PRODUCTIVE NINETY-DAY CORN GROWN.

This variety of corn was originated by us and while it was well-nigh perfection itself when we first began to catalog it, we have constantly tried to improve it in every way we could by culling out all barren stalks and increasing the number of ears to each stalk, and during the past ten years we have made yields of over 60 bushels per acre, and in 1914 we grew the enormous yield of 94 bushels on our experimental grounds, or over 20 bushels per acre better yield than from any one of six other early varieties, side by side with it on the same ground under identical conditions. We have frequently gathered good, sound, solid, well-matured hard corn from it in 75 days from the time it was planted and we have shelled corn from it 85

days from time of planting.

For an early feeding corn Queen of Nishna 90-day Corn has no equal. This makes an ideal ensilage corn for the northern farmer, maturing before frost and making a large yield. For the eastern farmer the same may be said, adding that this makes a fine feeding corn. In the south this corn has taken the place of the well-known me corn, making a greater yield and being a fine drought resister.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

Formerly Jefferson-Ratekin Seed Co.

St. Regis Red Raspberries

The Best Everbearing Variety



BEARS THE FIRST SEASON

Plants set in early April give ripe berries the latter part of June. The St. Regis is of iron-clad hardihood, the canes standing severest cold uninjured, and its foliage never suffering from sunburn or scald. It is the earliest of all red raspberries and is wonderfully prolific, the first or main crop being far greater than that of any other red variety. It fruits all summer on the old canes in generous quantities until late in August, then berries begin to ripen on the young current year's canes, which continue to produce in increasing numbers until severe frost. Berries are bright crimson, of large size and surpassing quality.

Price: 10c each, 3 for 25c; dozen, \$1.00; \$7.50 per hundred, delivered postpaid.

Jefferson Seed Company, Jefferson, Iowa

Senator Dunlap

SENATOR DUNLAP (S)—Medium to late. Many regard this strawberry as the best one of all varieties.

It has won great popularity, has long fruiting season, growing immense quantities of large, handsome berries of most excellent quality.

They are a favorite in the market everywhere. The color of the berry is a rich dark red with a glossy finish, snading to dark scarlet on the under side. It has a bright yellow colored seed which gives it a very rich appearance.

It is noted for uniformity in size and shape; its very delicate flavor and the sureness of its crop made it a general favorite, and in every respect ideal. You cannot go wrong to order part of your crop from Senator Dunlap.

Has a fine berry, is prolific, stands drouth, heat and cold, and transplants easily.

There is danger of it matting together too thickly in a row.

Senator Dunlap has now been introduced several years and has been tested in every part of the country. The tremendous demand for the plants is satisfactory evidence that in the hands of most growers it has "made good."



Brandywine



BRANDYWINE (S)—This is the handsomest strawberry grown, and is considered the best fancy market berry. It is of a fine, rich flavor, rarely found in others. It is by far the best for canning or table use in any way. It is dark red to the center; great yielder of large, round berries; season medium to late; very firm. This variety is being planted very extensively. Makes plenty of strong, well-rooted plants. A good shipper.

Prices, either variety: $\frac{1}{2}$ dozen, 15c; dozen, 25c; \$2.00 per hundred, delivered postpaid.

Jefferson Seed Company

JEFFERSON, IOWA



Imperial White

This is a white corn with a red cob. A variety that has become very popular and a great favorite with our customers—the farmers everywhere. This means about everywhere that corn is grown, for we have sold and shipped it to farmers in every state in the Union—hundreds and thousands of bushels every season, especially since we have got it so well introduced; thus we can say for it that there is no variety, white or yellow, that has given better or more uniform results and satisfaction than "IMPERIAL WHITE."

We originally obtained our start of this excellent variety of corn about sixteen years ago, from a farmer in Central Northern Illinois, one of the best corn growers of that splendid corn growing section, who had grown it and improved it for many years to the exclusion of other sorts. Since we began growing this variety, it has not only become a favorite with us, but we have sent out hundreds and thousands of bushels of it to every part of the country—north, south, east and west—every year, especially within the past ten years—since we got it well introduced and found what splendid satisfaction and results it gave everywhere. In fact, we do not recall ever having had a bad report or dissatisfied customer who planted this variety of corn.

DESCRIPTION—It is pure white, with red cob—a sign within itself of great vitality; ears run from 9 to 12 inches long, measuring from 7 to 8 inches in circumference; 16 to 24 rows of deep grains firmly set on a small red cob, as shown by the accompanying illustration, producing one or two and often three good ears to the stalk. The stalks are short and heavy, averaging from 7 to 10 feet in height, with a large amount of foliage. This corn does well anywhere and everywhere, and is especially adapted to old, poor and thin land, and will make a good crop where other sorts fail. It is also especially adapted to the eastern and southern states, and where early drought and parching hot weather often injures other sorts. It matures safely anywhere in from 90 to 100 days; is very solid and compact. We can heartily recommend this corn to our customers as one of the surest croppers and best yielders we grow, and could print hundreds of testimonials from those who have tried it, if space would permit, all verifying what we have said of this splendid variety of corn.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.

Hickory King

HICKORY KING

is a white variety of field corn which has the largest grains with smallest cob of any corn in existence. The grains are so large and cob so extremely small that when the ear is broken in two pieces a single grain will cover completely the cob section. This corn is of vigorous habits, is a splendid and sure cropper, is especially well suited to light or thin soil and is a very desirable variety and largely planted in many of the southern states. It, however, does well in the northern and central western states. But does not mature as early by 30 days or more as our Silver Mine, Diamond Joe or Imperial; ears run from 7 to 9 inches long, and usually contain 12 rows of kernels on the cob—without it does better on real thin soil, and stands drought equal to Milo Maize. Yields 20 to 35 bushels per acre.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.



WHAT THE FARMER WANTS IS THE MOST BUSHEL OF GOOD SOUND CORN PER ACRE.

The important point in which the practical farmer is interested is in the most bushels of good, sound, solid corn to the acre. The score card and the corn shows have their place, but the commercial corn growing farmer should not allow himself to become absorbed in ideal ears, unless they can show by records prepotent power of reproduction. In many competitive exhibitions and corn shows we have seen fellows carry away premiums and prizes on most perfect ears; ears selected to conform to the score card by which they were to be judged. Credit for such exhibitions in many cases are due more to an understanding of the score card by the exhibitor than to the general excellencies of reproduction. In fact, we have seen some very perfect ears of corn grown in a field of the most scrubby sort, ears that would have made a creditable showing at any farmers' institute, state or national corn show, and if put up and sold at auction would no doubt have brought fabulous prices.

Theoretically, a mother ear should be cylindrical, well filled out at butt and tip ends; kernels evenly and closely set on the cob and as nearly uniform in size and shape as possible, thus securing an even, uniform stand. But back of this there must be a performance record.

In other words, its ancestors should have a record of its performances under ordinary conditions. Seed coming from ordinary looking ears, but possessing such traits of inherent power as to produce medium-sized ears on a maximum number of stalks, is certainly far preferable, and more profitable for the farmer to plant, than the "finest" show corn ever put on exhibition at a corn show that has been selected MERELY from point of beauty, and in accordance with the score card. This is not saying that nothing can be accomplished by physical selection alone, and planting of seed from good symmetrical ears. A whole lot can be accomplished both in improvement of type and to a certain extent in yield but corn cannot be bred up to perfection and highest degree in one, two or three years.

After all is said, what the ordinary farmer wants who plants and grows corn for feeding and commercial purposes, is seed corn that will grow, and varieties that will give him the most bushels of good, sound, solid corn to the acre, containing protein of the most nutritious and best fattening quantities, and that sells at best prices on the market and to feeders. We believe our seed meets this requirement in every respect.

Plant Dependable "Jefferson Brand" Seed Corn

Improved White Cap Bloody Butcher

Bloody Butcher Is a very early, heavy yielding variety of corn—one of the best, most hardy and most certain to always make a good crop, wet or dry, on either rich or poor land.

We obtained our original seed of this variety in central South Dakota in 1907, twelve years ago. On account of its early maturity there and its yielding qualities, it was grown where we got our seed, almost to the exclusion of all other field varieties. It is a distinct variety of corn, one of itself. There is none like it. Thus it bears the name given it by the originator, "Dakota White Cap Bloody Butcher," years ago. It can easily be distinguished from any other variety we have ever seen. On the ear, outside, top of kernel, it is white capped; inside after shelled it looks a bloody red color; cob as white as snow; ears long and slim, running from 12 to 16 rows, and many of them 15 inches long—perhaps running more uniform in size and length than any other variety; rows very solidly set on cob; depth of kernel only medium—almost as broad as it is long. When we first introduced this corn the ears did not run as large as our improved stock of it has since, and does now. This we attribute to the fact that we have greatly improved it by careful selection of our seed stock. Being of an entirely different type of corn from other sorts—not as handsome and attractive to the eye as a golden yellow, or white as snow, farmers were slow to give it a trial, but practically every one, without exception, became so pleased with it, practically all have adopted it as one of their main field varieties, which has proven not only to be fully two or three weeks earlier to mature than the ordinary standard varieties, but among their heaviest yielding sorts. Here with us, the past season, which was ideal for corn, many of our farmers obtained an average of 60, 70 and 80 bushels per acre. In fact, greater and heavier yields from it than from other varieties. When we first started to list this corn, we listed it only as an extra early variety, and claimed it to yield only 30 or 50 bushels per acre under good conditions, but it has proven always to exceed yields in excess of our claims for it. It has also responded to careful attention, more quickly and definitely, from careful selection of our seed stock, than any other variety we have attempted to improve or propagate beyond its normal habits. Since this improvement has been so manifest, compared with what it was when we began its introduction, we are now selling fifty bushels of seed where we only sold one, seven or eight years ago. In short, it is an early sort that any farmer can tie to, and the more he plants the better pleased he will be. The nutritious qualities of the Dakota Bloody Butcher corn is very high; many stock feeders claim that one bushel is equal to 1½ bushels of ordinary varieties. We, however, do not claim this much for it, but it is certainly of unusual nutrition, a variety of corn that is worth considering. It does better on old, poor,



Improved White Cap Bloody Butcher
(early) 85 to 90 days.

thin land than any other variety, save possibly "Hickory King." But Dakota Bloody Butcher being fully six weeks earlier to mature and yielding twice as much per acre, there can hardly be a comparison made between them. Length of time for it to mature is from 80 to 90 days. For early feeding there is no corn that surpasses it. Every stock farmer should plant some of this corn. It will not disappoint your best expectations.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.

White Cap (Large Eared) Early Yellow Dent White Cap Yellow Dent

We have grown and handled this excellent early variety very extensively for several years and have found it a very early maturing corn and an enormous yielder for an early corn. It, however, is not quite as large as "Queen of Nishna" or "Dakota Bloody Butcher," but is equally as early as "Pride of the North," and we regard it as a much larger yielder and while we do not admire the color of this corn as much as we do a pure yellow or white, it produces the bushels and for feeding or market purposes it is equal to the clearest white or yellow corn grown. The grain is a white cap, and the balance of it is a pale color between a white and yellow. All those who have planted it are wonderfully pleased with it, and in the increased demand for it, also reports we have received, many of which are really astonishing, compel us to recognize the fact that White Cap Yellow Dent Corn has come to stay. Our stock of this corn is invariably exhausted every season that we have been handling it, thus proving its growing popularity as we have grown an increased acreage and quantity of it each succeeding year.

I am not advising you to plant all your crop to this variety to the exclusion of other sorts, but for a field of corn for early harvest and for feeding, you will do well to try ten or twenty acres of it. I have known instances, plenty of them, where it was planted as late as June 15th and it produced sixty, seventy and eighty bushels of good, sound corn to the acre.

PRICE: Ear, 50c; lb., 35c; 7 lbs. (enough to plant 1 acre), \$2.25, postpaid.

See enclosed pink price list for peck and bushel prices.



Mammoth (Early, 80 days) Longfellow Flint

Improved Early Flint Varieties

MAMMOTH LONGFELLOW FLINT is an eight-rowed yellow flint variety, with ears from ten to fifteen inches long, 2 to 2½ inches in diameter, and well filled out to the extreme end of the cob. The cob is small and the kernel large and broad; ripens in eighty days. This corn is well adapted to the northwest. Has been grown in northern Minnesota and North Dakota for fifteen years with great success and complete satisfaction. Average season of maturity, eighty days. Very prolific, having yielded 164 bushels of sound ears to the acre and has produced 194 bushels of ears to the acre in Vermont. Many stalks have two and very often three good ears. Stalks average seven to nine feet in height and make excellent fodder. Very few suckers.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.

Dibble's Mammoth Early Yellow Flint Corn

Dibble's Mammoth Early Flint

Each year from June 1st to September 1st our time is largely devoted to outside field work, looking after crops and seeds that are being grown for us under special contract, by special contract growers. At the same time, we are making every possible investigation and research—seeking facts and information as to improved and new varieties of seeds and plants of practical value for both the farmer and truck grower (the garden), as well as their general and special utility. By reason of this we have learned the experiences of all classes of farmers and others interested in agricultural pursuits, thus enabling us to help and assist many—very many of our customers in their selections (selections of seeds and varieties best adapted to their locality, latitude, climate, seasons and soils, etc.). When we can do this, or become helpful to our customers, it not only becomes our duty but it is one of the most pleasurable parts there is connected with our business, the seed business.

It was while in New York State, some eight or ten years ago, that we heard and learned much about "DIBBLE'S MAMMOTH EARLY YELLOW FLINT CORN," for owing to the shorter, cooler, corn growing seasons in Northern New York, and throughout the New England states, they require the very earliest dent varieties to mature there before frost. They also plant and grow a large part of their corn crops to the Flint varieties, they being much earlier to mature than the standard Dent varieties, such as is grown throughout the Central Western states and Corn Belt sections. But these latter sorts are grown quite extensively, specially for fodder and ensilage purposes.

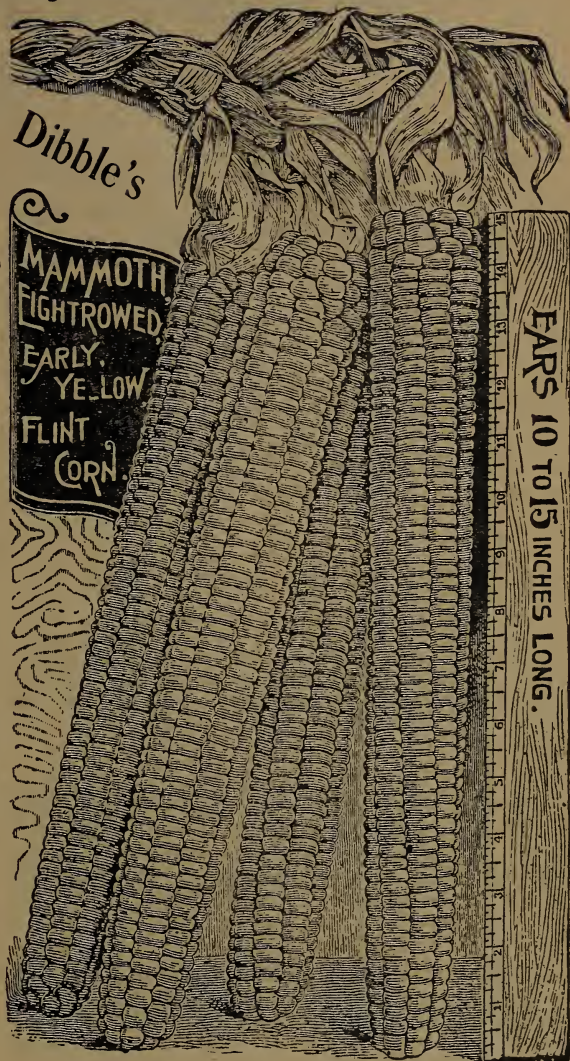
It was while we were visiting in Northern New York that we found this Champion Mammoth Early Flint Corn, "DIBBLE'S MAMMOTH YELLOW FLINT." Everywhere grown it was extolled. Thus our attention was attracted to it, and after a careful, personal investigation, and upon the strength of this we went directly to the originator of this corn and purchased 10 bushels for our own planting, enough to plant 65 or 70 acres of land—seed selected and saved from his own private stock for seed purposes. This was how we got our start. Since then we have grown this greatly improved and superior variety more extensively than any of our Flint varieties, and as a matter of fact, sell more of it than we do of all our other varieties combined.

DESCRIPTION.—Briefly told, we believe this to be the earliest and best field variety of Flint corn grown—the largest and heaviest yielding, and as early as the earliest—ready for the knife in 65 to 70 days from planting and perfectly matured and hard in 75 to 80 days. The stalks average 8 to 12 feet in height; each stalk producing from one to three good ears, averaging from 10 to 15 inches in length, containing 8 rows on the cob and producing 100 to 200 bushels of ears per acre, and has been known to have given yields of 225 bushels of ears per acre and over in many fields.

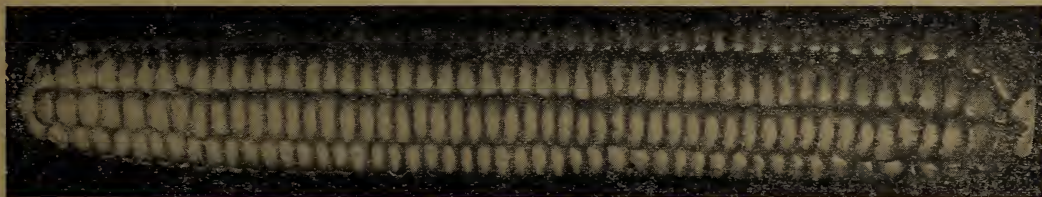
Our seed of this variety, as well as all other of our Flint varieties, will be shipped shelled—but all hand selected—no ears shelled that run less than 10 inches long. We guarantee all our Flint varieties to show **GOOD, STRONG GERMINATION**, and if it does not so prove by test, it may be returned any time within ten days from receipt at our expense and purchase price will be promptly refunded.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.



Sanford's White Flint-- Handsomest of all Flints



An eight-rowed white variety, with ears from ten to fifteen inches long, two to two and one-half inches in diameter, and well filled out to the extreme end of the cob. The cob is small and the kernel large and broad; ripens in seventy-five days. This corn is well adapted to the northwest, also in the east and New England states, and is said to have produced 200 bushels of ears to the acre in Massachusetts and other New England states. Has given excellent results in Minnesota, the Dakotas and other northern states. Excellent for ensilage. Stalks are very leafy, splendid for feeding grain.

PRICE: Ear, 50c; lb., 50c; 7 lbs. (enough to plant 1 acre), \$2.50, postpaid.

See enclosed pink price list for peck and bushel prices.

Early Flint Varieties for Grain and Fodder Crop Combined

When it comes to Flint varieties for ensilage you want to quit looking after you have come to **Dibble's Mammoth Yellow Flint**. There is nothing grown—nothing ever offered that is better—none that equals it. First, it is as early as the earliest varieties—making itself in sixty-five to seventy-five days, corn weather. It grows stalks from 9 to 12 feet high and leaves or blades from tassel to ground, and both are very nutritious, and stock devour stalks and blades as readily as clover hay. It produces one, two and three ears from 10 to 15 inches long, and has been known to give a yield of 225 bushels of ears in the New England states, and almost as much in Minnesota and the Dakotas. It's the corn for fodder. It's the corn for ensilage and the best for everywhere.

Plant Dependable "Jefferson Brand" Seed Corn

Five Grand Varieties of Fodder Corn



For years we have been preaching the great value and importance of growing fodder and ensilage corn to the farmers. The dry seasons of the past few years have assisted us in bringing these facts home to them, and has fully aroused them to its great importance as never before. From all reports coming to us from everywhere, there was many times over more corn cut for fodder and ensilage purposes the last year or two than any half dozen years in the past. When dry weather comes on in the early part of the season and other crops were burned out and withered under the blasting hot winds, the farmers planted corn for fodder and ensilage because it was too late to plant other crops. They later found they had hit the mark in so doing. Every one of them will hereafter plant a liberal acreage for fodder and ensilage purposes, because they have found it one of the most profitable crops they can grow, not as a makeshift, but as a necessity.

We make a specialty in seed corn for fodder and ensilage purposes and our customers will find our varieties of the very best and highest quality, seed they can depend upon to grow.

The Silo We are not selling silos. We have none for sale, nor do we have an interest or stock in any factory. There are many good silos manufactured. We do not know which one is best, but we do know that every farm and every farmer who has ten or twenty head of stock or more, should have a silo. Silage is good for all stock. The silo is endorsed by every agricultural college, every leading agricultural publication, and by all who have used them. They are money savers and money makers and will keep your stock healthy, thrifty and fat.

Varieties of Fodder Corn Corn Fodder may be divided into five classes. Large Southern varieties, Medium Dent varieties, Early Dent varieties, Flint varieties and Sweet varieties. Each of these have their friends. All may be successfully grown for fodder in almost any latitude. The merits of each class follow:

Jefferson's Giant White Fodder Beyond a doubt among the best fodder corns, either to feed green right out of the field, or to put up for the silo, or to cure and stack away, cropping as high as 35 tons to the acre. It is sweet, tender and juicy, and furnishes more nourishment than any other variety; has short joint, therefore an abundance of leaves and blades and growing as tall as the tallest, thus making it of extraordinary productiveness. The only fault we have heard of this fodder corn is that it grows so tall, making it hard to handle. We measured one stalk from our crop last fall that was eighteen feet and four inches tall in height and measured 1 1/2 inches in diameter at the base and contained thirty-two pairs of long, broad blades.

Drill 1 to 1 1/2 bushels to the acre in rows about 3 1/2 feet apart. Five or six kernels to each foot in the row, plow and cultivate until three feet high, stirring the surface of the ground often, after which it will take care of itself.

PRICE: Ear, 50c; lb., 35c; 7 lbs., \$2.25, postpaid.
For peck and bushel prices, see enclosed pink price list.

Red Cob Fodder Corn This is the standard Southern variety which has made a wide reputation all over the country and its noted for its splendid qualities for both fodder and ensilage purposes. It grows very tall, ranging from 12 to 16 feet high, and has a very leafy, broad blade.

PRICE: Ear, 50c; lb., 35c; 7 lbs., \$2.25, postpaid.
For peck and bushel prices, see enclosed pink price list.

Medium Dent Fodder Corn There are many who prefer smaller growing corn for fodder, claiming for it the following advantages: 1. That it is more readily handled by the corn harvester or even the grain binder. 2. That it matures earlier and gives well-formed and often partially or fully ripened ears. 3. That it is more easily cured. 4. That the smaller stalks make finer and richer fodder. 5. That the fodder is more easily handled in putting through the silage or fodder cutter, or if fed long, is more easily handled in the manger.

We believe this variety will best please the advocates of the type of corn above referred to. It is tall growing, averaging from seven to eight feet. It has a small stock and is very leafy. It will form, even in northern Minnesota and in North Dakota, good-sized ears, thus adding to its feeding value.

PRICE: Ear, 50c; lb., 35c; 7 lbs., \$2.25, postpaid.
For peck and bushel prices, see enclosed pink price list.

Flint Varieties for Fodder The farmers of Maine, Vermont, New Hampshire, Massachusetts, and many other eastern states use for fodder corn the early Flint varieties almost exclusively. There is no waste to this class of corn, as the stalk is as greedily eaten as the leaves and the feeding value is superior to everything but the Sweet Fodder varieties. Early Yellow Flint is by far the best variety for ensilage purposes. It is as early as the earliest dwarf varieties, making itself anywhere in from 60 to 75 days, safely beyond danger from frost with good corn weather. It grows stalks averaging from 9 to 12 feet high and leaves or blades from tassel to ground. Both leaves and stalks are very nutritious. Stock will devour every vestige of it, stalks and blades, as readily as they eat clover hay. It produces from one to three ears running from 10 to 15 inches long and has been known to yield as high as 225 bushels of ears in Massachusetts and almost as much in Minnesota. Don't pass up Flint corn if in need of fodder or ensilage corn. Plant in rows 3 1/2 feet apart, drilling eight to ten kernels to the foot in the row, and cultivate same as general field crop.

PRICE: Ear, 50c; lb., 35c; 7 lbs., \$2.25, postpaid.
For peck and bushel prices, see enclosed pink price list.

Stowell's Evergreen Sweet Corn Among all the splendid varieties for fodder and ensilage purposes, we regard Stowell's Evergreen Sweet Corn as one of the most valuable varieties grown, either for fodder, canning purposes, or for seed purposes. In addition it is a most excellent variety to cut and throw out to milch cows, horses, hogs and the colts and calves during the summer and fall months when grass is dried up and pasture short. As a green fodder fed in this way, one acre will furnish as much feed as eight acres of grass. The sweet, juicy stalks have a flavor that makes stock like it as nothing else. It is claimed by all dairy farmers that sweet corn will not only increase the flow of milk, but will add a third to a half in the cream production. All we say about its wonderful qualities as a green feed may be said with equal truth and force when it is cut up and put into shocks and fed during the winter months. Even in its dry stage stock of all kinds will eat every vestige of the stalks and blades. There is no waste whatever in this corn.

Plant with drill in rows 3 1/2 feet apart, eight to ten kernels to the foot in the row. Cultivate thoroughly, plowing deep and close to the corn the first time, after which cultivate shallow or surface cultivation until three feet high. This variety of corn will make you from 15 to 30 tons to the acre.

PRICE: Ear, 35c; lb., 50c; 7 lbs., \$2.50, postpaid.
For peck and bushel prices, see enclosed pink price list.

GARDEN AND FARM CALENDAR

Information given here applies to climate and location. Allowance must be made according as they are early or later.

January Send order for seeds now, while stocks are full, so as to have them on hand as the sowing seasons come around. We can ship later if desired. Prepare hot beds, start in them early Cabbage, Lettuce, Radish, Beet, Cauliflower, Onion and Pansy, and some other flower seeds which require transplanting. (See list under Flower Seeds).

February If not already sown start in hot beds or cold frames early Cabbage, Lettuce, Radish, Beet, Cauliflower, Onion, and flower seeds for transplanting; late in the month Egg Plants and Peppers. These require warmer beds than the other seeds mentioned.

Outdoors.—The last of the month, if favorable weather, sow early Peas, Spring Kale, Beets, Spinach, Carrots, Celery, Radish and Parsley. Set Onion sets, Horseradish, Asparagus and Rhubarb. Plant trees and bush fruits. Sow Blue Ribbon Evergreen Lawn Grass. Prepare and sow Tobacco beds. Towards the end of the month sow Canada Field Peas with Oats for early hay. Clover and Grass seeds can be sown this month, also rape for grazing and soiling.

March Seeds for early plants can now be started in cold frames or window boxes instead of hot beds. Tender seeds, such as Egg Plants, Peppers, and tender flower seeds, require a little more heat.

Outdoors.—The sooner most hardy seeds are in, the better. We name them in order in which they should be sown. Garden Peas in varieties for succession, Onion, Celery, Spinach, Leek, Parsley, Lettuce, Radish, Beet, Asparagus, Carrot, Parsnip and Salsify. Plant Irish Potatoes, Asparagus, Rhubarb roots and Onion sets if not already done. Set out Cauliflower, Cabbage, Onion and Lettuce plants from hotbeds after these have hardened by leaving the glass open at nights. Sow Herbs in a warm border. Sow Cabbage seed for summer crop. Sow the hardy kinds of flower seeds; also this is the proper month for sowing Lawn Grass.

For the Farm.—Winter and Spring Oats, Canada Field Peas, with Oats, Clover seeds, Grass seeds of all sorts, Tobacco seeds, should all be sown quickly. Plant Artichokes for hogs, sow Dwarf Essex Rape.

April Seeds that have not previously been put in as recommended in the preceding months can still be sown, except that instead of using hot beds for hardy sorts of plants they can now be sown in beds in the open ground. Summer Cabbage, Lettuce and Tomatoes should be sown for succession to follow the earliest sorts, likewise Beets, Radish, Peas. The first planting of Artichokes, Herbs, Corn, Snap Beans and Okra can be made early this month, and Cucumber, Squash, Cantaloupe and Watermelon the latter part, if the weather is favorable; otherwise defer until May. Cabbage, Lettuce, Cauliflower, Onion and Beet plants, which have been started earlier, should be transplanted; also Strawberry plants set, as this is the best month. Sweet Potatoes can be put in hot beds previously used for Cabbage. Lawn Grass can still be sown, and all Clover and Grass seeds. Sow Mangel Wurzel and Steak Beet. Plant Corn for early crop.

May This is the month for sowing most tender seeds out of doors, and all other seeds which were not sown previously can be put in out of doors. If Cucumber, Cantaloupe, Watermelon and Squash have not been planted put them in as early as possible. Snap Beans for succession, Lima and Pole Beans first planting should be made early. Cabbage seed for fall and winter use should be sown about the 15th; also Black-Eye Peas for winter use. Set out plants for Tomato, Pepper, Sweet Potatoes and Egg Plant. Continue sowing flower seeds and plant bulbs.

For the Farm.—Sugar Beets and Mangel Wurzel for winter feeding and stock can still be sown; also all Sorghums, Millet, Fodder Plants, Cow Peas, Soja, Navy and Velvet Beans can be planted. Set out Tobacco plants latter part of the month. Keep down weeds and destroy the first crop of insects effectually.

TABLE SHOWING QUANTITIES OF

	Weight per bushel	Quantity to sow 1 acre
Alfalfa	60 lbs.	18 to 20 lbs.
Barley, broadcast	48 lbs.	2 to 3 bu.
Bean, Dwarf, in hills	60 lbs.	1 ½ bu.
Bean, Pole, in hills	60 lbs.	30 lbs.
Beet, Table, in drills	60 lbs.	6 lbs.
Beet, Mangel, Wurzel	60 lbs.	6 lbs.
Broom Corn, in hills	46 lbs.	10 to 12 lbs.
Buckwheat	52 lbs.	1 bu.
Carrots, in drills	50 lbs.	3 to 4 lbs.
Corn, in hills (for grain)	56 lbs.	7 or 8 lbs.
Corn, in hills (for fodder)	56 lbs.	14 to 20 lbs.
Clover, Alsike	60 lbs.	6 to 8 lbs.
Clover, Red	60 lbs.	8 to 10 lbs.
Clover, White	60 lbs.	4 to 6 lbs.
Cucumber, in hills	60 lbs.	4 to 6 lbs.
Flax, broadcast	56 lbs.	40 to 50 lbs.
Grass, Kentucky Blue	14 lbs.	30 to 40 lbs.
Grass, Orchard	14 lbs.	25 to 35 lbs.
Grass, English Rye	14 lbs.	3 bu.
Grass, Red Top	14 lbs.	20 to 30 lbs.
Grass, Timothy	45 lbs.	15 to 20 lbs.
Grass, Lawn	14 lbs.	1 lb. to 20 sq. ft.
Kafir Corn, in drills	60 lbs.	6 to 8 lbs.
Kafir Corn, broadcast	50 lbs.	1 bu.

June Set out Cabbage, Tomato, Egg Plant, Pepper and Sweet Potato plants. Sow Tomato for late crop; likewise late Cabbage and Cauliflower for winter use. Plant Okra, Watermelon, Cantaloupe, Cucumber, Squash and Pumpkin for late use, and Snap and Pole Beans and Sweet Corn for succession.

For the Farm.—Sow the Millets, Cow Peas, Sorghum, Soja Beans, Navy Beans, and plant late Corn. Mangel Wurzel Beets can yet be sown for stock, but the seed should be soaked twenty-four hours before sowing.

July Plant Snap Beans for succession and Sugar Corn for late roasting ears. Set out late Cabbage plants for winter use, likewise Celery plants. This is the best month to sow Rutabaga, and they do best in rows. Plant Cucumbers for pickling and table, and late Potatoes for winter use.

For the Farm.—Sow German or Hungarian Millet for hay or fodder; likewise Corn in drills for ensilage or fodder. Buckwheat can be sown for bees as an improver of the soil, and for grain. Plant Navy Beans, Black, Black-eye and Whippoorwill Peas. Sow Crimson Clover at the last working of Corn.

August Continue planting Snap Beans for the table and pickles. If any Cabbage plants remain unplanted, put out at once; likewise Celery plants. Trim off the tops of Celery before planting, if the plants are large. Sow Lettuce seed for fall use; likewise Endive. Sow Spinach and Kale. Finish sowing Rutabaga seed. All kinds of Turnip seeds can be sown during this month. Crimson Clover is one of the best crops grown, and should be sown on every vacant place where crops have been cleared off; if it is not required for feed it will improve the soil equal to manure when turned under.

For the Farm.—Buckwheat, Rye and Barley should be sown for fall and winter grazing, and afterwards will make a crop of grain.

September Our Fall Catalog, issued about August 1st, gives full information about all seeds for fall sowing; mailed free upon request. Sow Lettuce, put out Onion sets, sow Winter Radishes, Spinach, Turnips, Mustard, Corn Salad and Kale. Dutch Bulbs, Hyacinths, Tulips, etc., can be planted toward the end of the month. Sow Evergreen Lawn Grass; nothing adds more to the attractiveness and beauty of a home than a nicely kept green lawn.

For the Farm.—Sow Crimson Clover this month. Winter Oats will do well sown this month, as they will get well rooted before winter. Sow all kinds of Grass and Clover seeds and Winter and Sand Vetch. Continue to grow Barley and Rye, as they are useful for winter grazing as well as for grain.

October Put out Onion Sets. Sow Turnips for salad, Kale, Mustard, Spinach and Lettuce. Sow Lawn Grass seed. Fall seedling does better than spring seedling. Plant Hyacinths, Tulips, etc. Sow Pansy seed in cold frames for spring plants.

For the Farm.—All kinds of Grass and Clover seeds can be sown this month, but the earlier Clover seed is put in the better. Sow Wheat, Oats, Rye, Barley, Vetches.

November Sow Lettuce and early varieties of Cabbage in cold frames, leaving the glass off at the time to harden them. Set out Cabbage and Lettuce plants. Lawn Grass seed can yet be sown, but the earlier it is put in the better. All kinds of Flowering Bulbs set out in the fall can be put in this month.

For the Farm.—Wheat, Rye, Barley, Timothy and Red Top seed can yet be sown, but the earlier they are put in the better.

SEED USUALLY SOWN PER ACRE

	Weight per bushel	Quantity to sow 1 acre
Melon, Musk, in hills	50 lbs.	2 to 3 lbs.
Melon, Water, in hills	50 lbs.	4 to 5 lbs.
Millet	50 lbs.	1 to 1 ½ bu.
Oats	32 lbs.	2 to 4 bu.
Onion Seeds, in drills	52 lbs.	3 to 5 lbs.
Onion Sets, in drills	32 lbs.	6 to 12 bu.
Parsnips, in drills	50 lbs.	4 to 6 lbs.
Peas, field or stock, broadcast	60 lbs.	1 ½ to 3 bu.
Pea, Garden, Wrinkled, in drills	56 lbs.	1 ½ bu.
Potatoes	60 lbs.	8 bu.
Pumpkins, in hills	24 lbs.	3 lbs.
Radish, in drills	60 lbs.	8 to 10 lbs.
Rape, Dwarf Essex	50 lbs.	5 to 8 lbs.
Rye	56 lbs.	1 ½ to 2 bu.
Salsify, in drills	50 lbs.	8 to 10 lbs.
Sorghum, or Sugar Cane	60 lbs.	1 to 2 bu.
Spinach, in drills	50 lbs.	15 lbs.
Squash, Bush Varieties, in hills	50 lbs.	4 lbs.
Squash, Running Varieties, in hills	50 lbs.	3 lbs.
Tomato, to transplant	50 lbs.	¼ lb.
Turnip, broadcast	50 lbs.	2 to 3 lbs.
Turnip, in drills, 1 oz. to 250 ft. of drill	50 lbs.	1 ½ lbs.
Vetch	60 lbs.	30 to 40 lbs.
Wheat	60 lbs.	1 ½ to 2 bu.

Plant Dependable "Jefferson Brand" Seeds

VEGETABLE AND FLOWER COLLECTIONS

Our Home Garden Collection No. 1

\$1.50 Gets This Complete Collection Delivered Free at Your Door

Thirty-eight best varieties of Vegetable Seeds, including nine 1-3 pint packages of Beans, Peas and Sweet Corn.

The Biggest and Best Bargain Ever Offered by Any Seed House

- 1-3 pint Beans, Improved Golden Wax.
- 1-3 pint Beans, Long Yellow Six Weeks.
- 1-3 pint Beans, Stringless Green Pod.
- 1 large packet Beet, Early Eclipse.
- 1 large packet Beet, Blood Turnip.
- 1 large packet Cabbage, Early Jersey Wakefield.
- 1 large packet Cabbage, Autumn King.
- 1 large packet Carrot, Danvers Half Long.
- 1 large packet Celery, Golden Self Blanching.
- 1 large packet Cucumber, White Spine.
- 1 large packet Cucumber, Chicago Pickling.
- 1-3 pint Sweet Corn, Golden Bantam.
- 1-3 pint Sweet Corn, Evergreen.
- 1-3 pint Pop Corn, White Rice.
- 1 large packet Egg Plant, Black Beauty.
- 1 large packet Endive.
- 1 large packet Lettuce, Early Curled Simpson.
- 1 large packet Lettuce, Improved Hanson.
- 1 large packet Muskmelon, Rocky Ford.
- 1 large packet Watermelon, Cole's Early.
- 1 large packet Watermelon, Kleckly Sweet.
- 1 large packet Onion, Red Wetherfield.
- 1 large packet Onion, Yellow Globe.
- 1 large packet Parsley.
- 1 large packet Parsnip, Hollow Crown.
- 1-3 pint Peas, Alaska.
- 1-3 pint Peas, Gradus.
- 1-3 pint Peas, Telephone.
- 1 large packet Peppers, Bull Nose.
- 1 large packet Pumpkin, Pie.
- 1 large packet Radish, French Breakfast.
- 1 large packet Radish, Icicle.
- 1 large packet Salsify, Sandwich Island.
- 1 large packet Spinach, Bloomdale.
- 1 large packet Squash, Hubbard.
- 1 large packet Tomato, Earliana.
- 1 large packet Tomato, Matchless.
- 1 large packet Turnip, Purple Top.

This collection is already put up in sealed packages and cannot be changed.

Our Kitchen Garden Collection No. 2

25 Best Garden Vegetables Delivered Postpaid, for \$1.00

Compare this value with any collection offered by other seedsmen.

- 1 large packet Beans, Golden Wax.
- 1 large packet Beans, Stringless Green Pod.
- 1 large packet Beet, Early Dark Beauty.
- 1 large packet Cabbage, Jersey Wakefield.
- 1 large packet Cauliflower, Snowball.
- 1 large packet Carrot, Danvers Half Long.
- 1 large packet Celery, Golden Self Blanching.
- 1 large packet Cucumber, White Spine.
- 1 large packet Sweet Corn, Golden Bantam.
- 1 large packet Egg Plant, Black Beauty.
- 1 large packet Leek, London Flag.
- 1 large packet Lettuce, May King.
- 1 large packet Muskmelon, Emerald Gem.
- 1 large packet Watermelon, Kleckley's Sweet.
- 1 large packet Onion, Prizetaker.
- 1 large packet Onion, Red Weatherfield.
- 1 large packet Pepper, Bull Nose.
- 1 large packet Peas, Alaska.
- 1 large packet Peas, Gradus.
- 1 large packet Pumpkin, Pie.
- 1 large packet Radish, Icicle.
- 1 large packet Radish, French Breakfast.
- 1 large packet Tomato, Earliana.
- 1 large packet Tomato, New Stone.
- 1 large packet Turnip, Purple Top.

A total of 25 large packets sent postpaid for \$1.00. If ordered from catalog would cost \$1.60.

This collection is put up for mailing and cannot be changed.

Our Half Dollar Collection No. 3

As an inducement to those who have never tried our garden seed collections we are offering the following trial collection. Twelve full sized packages of new crop vegetable seeds for 50 cents.

- 1 large packet Cabbage, Sure Head.
- 1 large packet Beet, Blood Turnip.
- 1 large packet Carrot, Oxheart.
- 1 large packet Bean, Valentine.
- 1 large packet Lettuce, Hanson.
- 1 large packet Cucumber, White Spine.
- 1 large packet Watermelon, Tom Watson.
- 1 large packet Onion, Prizetaker.
- 1 large packet Radish, Icicle.
- 1 large packet Tomato, Earliana.
- 1 large packet Muskmelon, Rocky Ford.
- 1 large packet Turnip, Purple Top.

OUR FLOWER SEED COLLECTION AND OFFERS

Have you plenty of Flowers about your home? If not, why not? Wouldn't you like to have nice flower beds about your home in 1920. Flowers beautify and make the home attractive as nothing else can do, except little children. A man or woman who lives in a home surrounded by flowers and shade trees feels a satisfaction and contentment of life, that the occupant of a home without such surroundings cannot possibly feel. By offering you the following collections, we make it easy for everyone to have beautiful flowers at very little cost.

Our Introductory Collection No. 4

8 Large Packets, 25 Cents, Postpaid.

- 1 packet Pansy.
- 1 packet Balsam.
- 1 packet Petunia.
- 1 packet Poppy.
- 1 packet Verbena.
- 1 packet Dianthus.
- 1 packet Aster.
- 1 packet Candytuft.

For 25 cents, we will send the above packets, postpaid. No changes allowed in this collection. All collections are put up for mailing before our busy time is on, which allows us to offer them to you at such low prices.

Lewiston, Ill., June 25.

Gentlemen—I ordered one of your Big Banner Flower Seed Collection last winter and I wish you could see the splendid flower beds which I now have. I have been supplying all my neighbors with beautiful flowers and everyone of them declare their intentions of ordering one of your collections another year. Your seeds are the best I ever saw. Put me down as a life long customer.

MRS. O. E. LONG.

Our Big Banner Half Dollar Collection No. 5

18 Large Packets, 50 Cents, Postpaid.

- 1 packet Amaranthus.
- 1 packet Fine Mixed Asters.
- 1 packet Sweet Alyssum.
- 1 packet Ageratum.
- 1 packet Antirrhinum.
- 1 packet Balsam.
- 1 packet Candytuft, Empress.
- 1 packet Canterbury Bell.
- 1 packet Chrysanthemum.
- 1 packet Cosmos.
- 1 packet Dianthus, Superb.
- 1 packet Forget-Me-Not.
- 1 packet Marigold.
- 1 packet Mignonette.
- 1 packet Dahlia.
- 1 packet Pansy.
- 1 packet Mixed Sweet Peas.
- 1 packet Carnation.

For 50 cents, we will send the above full-sized packets, postpaid. No changes will be allowed in this collection.



The Vegetable Garden

The vegetable garden is one of the most important and valuable parts of the farm or home, for what is healthier and cheaper than a nice lot of fresh vegetables, such as radishes, corn, lettuce, tomatoes, peas, etc., for the table, any one of which can be easily grown by following our instructions.

Seeds of the very best quality often fail through improper treatment, for instance a small seed may be sown so deeply that the young plant cannot reach the surface. More failures result from disregard of the conditions necessary to germination than from any inferiority of the seeds used.

There are several conditions necessary to the successful germination and growing of seeds. There must be a proper temperature, sufficient moisture, and free access of air. The soil must also be in proper condition. If heavy rains have compacted the surface of the soil and the sun has baked it to a hard crust, it will be impossible even if other conditions are favorable, for the tender plants to force their way through and many perish from this cause alone.

Beets, Peas, Cress, Lettuce, Radish, Turnips, etc., germinate rapidly at a temperature of 45 degrees, but if Melons, Squash, Tomatoes, Cabbage, Bush or Pole Beans, and other plants of sub-tropical origin, are sown under the same conditions, they will be apt to decay, as for their prompt germination they will require a heat of at least 60 degrees. For this reason many seeds fail yearly from too early sowing and the seedsman wrongly blamed. We give full and explicit cultural directions at the head of each variety listed on the following pages, explaining the best manner of seed sowing and planting as found to be most effective at our trial grounds, consequently we feel confident that should you follow these directions carefully and conditions be favorable, you are certain of success.

Our Seed Stocks are all carefully tested for both germination and purity and we use all care and precaution in sending out only pure bred strains of high germination.

We wish you would note that we are offering no freaks, no novelties, nothing but the standard tried and tested varieties, which are sure to please. All of our originations have been thoroughly tried and tested in our trial grounds, the seed is pure and true and can be depended upon. It is the law of nature and the tendency of many vegetables to revert to their original types, notwithstanding the care of the grower. This is especially true of many high priced new introductions that have not been thoroughly tried, the yellow podded Wax Beans becoming green, the yellow and white Celery becoming more or less green, Dwarf Peas becoming running sorts, etc.

Chief Factors in the Making of a Garden

There are several things to be considered in the making of a garden and a careful study of conditions will aid materially in the success. First, soil is an important point, and good, deep, rich loam on sandy subsoil is the best. If this cannot be had, any garden soil that is well manured will do. Second, the best vegetables cannot be grown in the shade, but must have plenty of sun, and a garden situated on a gentle slope to the east or south will give the best results. Third, good drainage must be had to insure the finest vegetables. This may be secured by digging trenches between the beds. Fourth, use plenty of fertilizers. Nothing is better for the purpose than well rotted manure. Fifth, keep the garden well spaded or ploughed, free from weeds, and the surface smooth and even. Sixth, last, but by no means least, be sure you have good fresh seeds, of high germination and purity, nothing is more disappointing than the making up of a garden and planting to poor seeds which fail to come up. One of the most important parts in successful gardening lies in the securing of fresh, reliable seeds, and we wish to caution everyone in the planting of cheap seeds, as these generally result in disappointment to those using them.

The Cold Frame

This is simply a frame placed upon the ground, no bottom heat being applied. On the outside, during the winter, it is banked with straw, hay or coarse litter. The soil should be very rich and is generally prepared by forking in and mixing thoroughly to a depth of ten or twelve inches a liberal supply of well rotted manure. These frames are prepared in the fall, and young Cauliflower, Cabbage and Lettuce plants set out in time to become well established before cold weather sets in.

Cabbage and Cauliflower should be set to the first leaf and the soil pressed firmly around the plant. In this vicinity the seed is usually sown about the middle of September. The plants will be ready to transplant in about one month. In severe weather the beds must be closely covered with mats or straw, and it is best to place in a sheltered situation.

The Making of a Hot Bed

In this section of country the hot bed is generally made the last of February or the first of March. The time must of course vary according to latitude. Provide a quantity of fresh horse manure from the stables and mix thoroughly with one-third to one-half its bulk of bedding straw or litter. Leaves are also recommended for this purpose, but are not always obtainable. After having mixed the manure and litter together tramp down the mass in successive layers, and form into a large pile, so that fermentation will proceed even in the coldest weather. In two or three days fermentation will be apparent by the escape of steam from the heap. Now turn again, and allow the heap to remain two or three days longer, or until the second fermentation commences. Make an excavation or pit 2 1/2 feet deep and of a size suited to the number of plants required. In this section of the country and farther north it is best to make this pit in the fall before the ground is frozen. The pit may be walled up with old boards, stone, brick, which ever is the handiest and should be made in some dry or sheltered spot facing the south or east if possible. While hot bed sashes are the best, it is sometimes inconvenient to get them and domestic cheese cloth will serve the purpose just as well. In using the latter, however, it is best to have boards or mats handy to act as protection against sudden changes and cold weather. The frame should be 18 inches high at the back and 12 inches in the front, which will give the proper slope to catch the sunlight.

When everything is ready, the manure is placed into the pit and trodden down firmly in layers to the required depth, 2 to 2 1/2 feet. Then put on the sashes, and keep the pit closed until the heat arises. At first it will probably be 100 degrees or more, which is too hot to sow the seed in; but in two or three days it will subside to 90 degrees or a little less, when the soil may be put on to a depth of 6 to 8 inches. The heat may be readily ascertained by plunging a thermometer into the manure. The soil should be of well rotted sod (or common garden soil will do), mixed with about one-third fine old manure, and in this the seed may be sown thinly in drills 2 or 3 inches apart and afterward thinned out. Air must be given every mild day by raising the sashes at the back. Water with tepid water whenever necessary and during cold nights and snow storms keep covered with mats or board shutters. Tomatoes, Peppers and Egg Plants should be sown in a separate frame from Cabbage, Cauliflower and Lettuce, as they require more heat. The same directions may apply to hot beds made on the surface of the ground, except that the manure should at least be a foot wider on all sides than the frame.

JEFFERSON BRAND GARDEN SEEDS



OUR POLICY

THE FUNDAMENTAL PRINCIPLES OF THE JEFFERSON SEED CO.

First "A square deal" and strictly honest treatment to every customer. Our policy is first, last and always to serve the customer to his best advantage. Our policy, "that the customer is always right," settles any controversy immediately. Our organization is comprised of men not only experienced in the seed business, but thoroughly schooled in our policy of honesty, fair dealing, and that the customer must always be satisfied. If any doubt arises, our patrons get the benefit. Bearing always in mind that "he profits most who serves best," this policy has built our business to such proportions that we are now serving thousands of pleased and satisfied customers.

Second To grow and send direct to you, the best and purest seeds possible to be grown. Most of our seeds are grown by us, or under contract for us, from seed which we personally know to be of pure stock. Our Vegetable and Garden Seeds are grown for us by experts in the different localities where the best seed can be produced. All of our seeds are grown from pure, carefully selected stock, and the greatest care taken in cleaning, sorting, etc., to keep them absolutely pure and unmixed. In sending you our catalog it is our aim to put before you the VERY BEST of everything in the seed line.

Third To give you an absolutely ironclad guarantee that if you are not pleased in every respect with our seeds, when received by you, you are at liberty to return them at our expense, and all money paid will be promptly refunded. This is the fairest offer we know of, and leaves it entirely up to the purchaser to be judge and jury over all purchases, and if found guilty, we stand ready to be convicted. This is our ironclad guarantee; a guarantee which no other seed house dares to duplicate, and we want our customers to take advantage of it.

Fourth These are our principles, a square deal to all, good seeds, and our guarantee that they are good seeds. We are carrying out these principles by giving every customer absolutely fair and honest treatment, and by continuing to sell as we have in the past, seeds of purity and strong germination; seeds that will grow, and seeds that will give you the best possible results. We make you money and save you money when you buy your seeds from us. You are buying direct from first hands, the seeds going direct from grower to planter. They are new crop grown, all thoroughly tested before sending out, and you can always depend upon them growing and producing best results.

Seed buying comes but once a year for most homes and gardens, and on the seeds depend the crop. For this reason the uppermost question should be, where can I get the best, not where can I buy the cheapest seeds. Old and inferior seeds can always be bought at cheap prices, but such compared with new seeds of pure varieties are very dear at any price, even as a gift. During the past season we have spared neither time, pains, labor nor expense to produce the best seed that could be grown. Crops generally in many sorts were short, and prices have remained high in proportion with everything else, but we are pleased to say to our thousands of friends and customers that our stock of Garden, Vegetable and Flower Seeds was never so large and complete, strictly new and first class, and nowhere can such seeds be bought at less prices.

We absolutely know, if you will do your part, that our seeds will give you such good results that you will be well pleased, and thereby help to increase our trade among your friends and neighbors. We believe there is nothing too good for our customers, and know they always appreciate and stand ready to reciprocate by saying a good word for us among their friends. We want to again urge our customers to order early. Right now is the best time, while you can secure your choice and pick, while our stocks are large.

NO FAKES AND NOVELTIES

In comparing our catalog with some others, you will find that we are offering no fakes or "novelties" at fabulous prices as some are. Most, if not all such "novelties" are usually some standard or old variety renamed in order to fool you into trying them at exorbitant prices. We simply ask you to take our catalog and sit down and look it through; find what you want, and make up your order and send it in. We will guarantee you to get the best of everything that is grown. If there are any items you want not listed in our catalog, include it in your order, and we will obtain it for you. We are at all times interested to know that our customers shall have the best seeds, and reap the best and most satisfactory results that can be obtained from any seeds grown. Our seeds are thoroughly tested as to germination as soon as coming into our house, as well as again before sending out. We have been in the seed business for a number of years, and have learned how to grow seeds, and how to know good and bad seeds. We hope to remain in the business as long as we live, therefore you can readily see that we have a thousand times more at stake in selecting only the best seeds, than do our customers. We send all seeds on ten days' approval of customer, and should a case arise where the seeds are not satisfactory, they will be replaced free of charge, or money cheerfully refunded. This is what few, if any seedsmen do. Our customer is always right; our reputation back of every seed sent out by us.

OUR PACKING DEPARTMENT

Our mail order packing department is complete in all its details. Every invention possible to quickly and accurately facilitate the prompt dispatch of orders has been made. In this department scores of clerks pick out the orders, check them, pack them, weigh and stamp packages, and then deposit them in United States mail bags furnished by the Government. This department can readily fill and dispatch 5,000 orders daily, and during our busy season from January 1st to June 1st, is open and running continually day and night. Our prompt service, our full equipment, in fact, everything we have, is at your disposal. We are here to serve you to your best advantage, as we are now serving thousands of customers, and only ask that you give us a trial order, and let us convince you, too, there are no better seeds grown than ours.

Formerly Jefferson-Ratekin Seed Co.

Highest Grade Vegetable Seed for 1920

Asparagus

Sow an Ounce of Seed to 50 Feet of Row.

Asparagus is rapidly becoming one of the most popular garden delicacies grown. Where but an odd individual or two grew asparagus a few years ago will be found hundreds cultivating it today.

Sow the seeds in drills, about one inch deep, and the rows about one foot apart. Keep the soil mellow and free from weeds during the summer, and in the fall or succeeding spring the plants should be set about one foot apart and the crown four inches below the surface. The beds should be narrow so as to permit of cutting to the center. Before winter cover the transplanted beds with about four inches of manure. Salt is an excellent manure for asparagus. Sow a little on the surface in the spring and it will keep down the weeds. The young tops may be cut for the table the second summer, but not very freely until the third.

Columbian Mammoth White A new and entirely distinct variety that produces shoots which are white and stay white as long as fit for use. It is more robust and vigorous in habit and throws up larger shoots and fully as many of them as Conover's Colossal, and requires no earthing up in order to furnish the white shoots so much sought after. **PRICE:** Large packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00, postpaid.

Barr's Mammoth A bunch of 25 edible shoots weighed 13 pounds. The shoots are quite often 1 inch in diameter, of a very fine flavor and are very tender and succulent. **PRICE:** Large packet, 5c; oz., 10c; ¼ lb., 25c; lb., 80c, postpaid.

Conover's Colossal A mammoth green sort of the largest size and of good quality. **PRICE:** Large packet, 5c; oz., 10c; ¼ lb., 25c; lb., 80c, postpaid.

Palmetto Mammoth in size, even and regular in growth and appearance. Usually ready for market before other varieties. **PRICE:** Large packet, 5c; oz., 10c; ¼ lb., 25c; lb., 80c, postpaid.



COLUMBIAN MAMMOTH WHITE.

Asparagus Roots By far the quickest way to obtain an asparagus bed is to set out roots; with large strong roots such as we supply, a bearing bed may be had in one year. Asparagus Roots thrive best in soil exceptionally rich and mellow and supplied with a liberal amount of humus. A simple way to start the asparagus bed is to plow furrows 7 inches deep and 3 to 4 feet apart, according to the richness of the soil, then set the plants, which should be at least 1 year old (2-year-old are better), in the trench, allowing 12 to 18 inches between them; spread the roots out well and cover with 2 inches of soil. After cultivation, gradually fill up the trench, eventually burying the crowns of the plants to a depth of 6 inches.

Cultivate shallow and frequently the first season and as soon as the stalks are dead in the fall, remove them and cultivate the entire surface of the bed to a depth of 3 inches, and again the latter part of June, working into the soil at this time a liberal supply of decomposed stable manure.

We send Asparagus Roots by express or parcel post. By either mentioned they will arrive in first-class growing condition. We offer large, strong roots, which produce the most satisfactory results. Roots put up in bunches of 25 each.

Any of the above varieties at the following prices:

ONE-YEAR-OLD ROOTS: Per doz., 35c; 25 for 60c; 100 for \$1.50; postpaid.

By express not prepaid: 100 for \$1.00; \$7.50 for 1,000.

TWO-YEAR-OLD ROOTS: Per doz., 50c; 25 for 80c; 100 for \$2.00; postpaid.

By express not prepaid: 100 for \$1.50, \$10.00 per 1,000.

Artichoke

One ounce of Seed will produce about 500 plants.

A delicious vegetable. The blossom is cooked and prepared like asparagus.

Plants set in any good soil with slight covering in winter will remain in bearing several years.

LARGE GREEN GLOBE. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.75; postpaid.

EARLIEST. The earliest Artichoke known. **PRICE:** Large packet, 10c; oz., 45c; ¼ lb., \$1.60; postpaid.

Broccoli

Culture same as Cauliflower.

Large White The most useful variety, easily grown. The plants are quite hardy. If set outdoors early in spring the crop will be ready the latter part of September. Successional sowing could be made for later cuttings. The heads are very large, firm, pure white and unsurpassed in quality. **PRICE:** Large packet, 10c; oz., 40c; ¼ lb., \$1.25; postpaid.

PURPLE CAPE—A standard sort; very fine. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.60; postpaid.

Brussels Sprouts

Pedigreed Hamburg This melting, luscious vegetable is unquestionably one of the choicest and most appetizing morsels ever set on a table. While in appearance they resemble miniature cabbage, they vastly excel the most tender and choicest cabbage ever grown. This exceptionally hardy type is easy to cultivate. Can be left in the ground long after frost, as hard frost enhances its eating qualities to a considerable degree. We have created an unprecedented demand for our Pedigreed Hamburg all over the United States owing to its remarkable juicy tenderness and strong, robust, healthy growth. We consider it incomparable.

Culture is the same as cabbage except that plants should be set 15 inches apart in rows 2 feet apart. **PRICE:** Large packet, 10c; oz., 35c; ¼ lb., \$1.00; postpaid.

Improved Dwarf Is planted all over the United States. It is a vegetable of great delicacy. **PRICE:** Large packet, 10c; oz., 30c; ¼ lb., 90c; postpaid.

Dalkeith A great improvement over the old-fashioned Dwarf. **PRICE:** Large packet, 10c; oz., 30c; ¼ lb., 90c; postpaid.

Borecole or Kale

One Ounce of Seed will produce 3,000 plants.

BORECOLE OR GERMAN GREENS. Culture: For late Fall or early Winter use, sow in June and transplant about the middle of July in rows 18 to 24 inches, setting the plants 12 to 18 inches apart in the rows. For Spring use, sow in August and transplant a month later. One ounce will produce 3,000 plants; ¼ pound enough for an acre. Protect during winter with a covering of hay or coarse litter. All kales are best when touched by frost.

Moss Curled The best and hardest variety of cultivation. Robust, very compact in growth, with dense moss curled leaves of deep green color. The stems produce a wealth of curly sprouts which are perfectly tender and of a delicious flavor. 30 inches high; stands cold weather and improves in deliciousness. **PRICE:** Large packet, 5c; oz., 25c; ¼ lb., 75c; postpaid.

Dwarf Erfurt This magnificent novelty was introduced from Erfurt, Germany, where it grows to perfection. It is extremely prolific, of light green color and most delicious flavor. Leaves large and curled like parsley. **PRICE:** Large packet, 5c; oz., 25c; ¼ lb., 75c; postpaid.

Tall Curled Scotch A hardy, ornamental plant, 3 to 4 feet high, with long, deeply cut and curled, light green leaves of fine quality. **PRICE:** Large packet, 10c; oz., 40c; ¼ lb., \$1.25; postpaid.

Gentlemen: I take great pleasure in saying the Columbian Mammoth White Asparagus I procured from you is doing exceptionally well. It is the best flavored asparagus I have ever tasted, and remains tender much longer than ordinary varieties.

Yours truly, CHAS. WATSON.

Watertown, Mass.

Beans--Bush or Snap Green Podded Varieties

Bush Beans are the type generally grown for early string or snap beans, both for home use and for market. They come in two general classes, the Green Podded and the Yellow, or Wax Podded varieties. It is question which type is the better. Some people like one and some the other. Some markets prefer the wax pods, while others prefer the green pods.

It is our personal opinion that there is really very little difference in flavor, yield, earliness, hardness or quality between the yellow pod and green pod beans, but still different gardeners and different markets have their preferences, so we must grow both kinds.

NOTE—Each packet of beans will contain two ounces, sufficient to plant about twenty hills. All beans priced by the packet, half pound and pound are delivered postpaid. Write for prices on large quantities.

CULTURE: Beans are somewhat tender, but it often pays to take some risk. Plant in warm, loamy soil at the beginning of settled, warm weather in spring, and at intervals for succession until August. Rows may be made two feet apart, and the beans planted a few inches apart in drills, or three or four beans in hills six or eight inches apart. Cultivate and hoe frequently, always, however, when the vines are perfectly dry. In hoeing draw the soil up towards the roots or plants. One quart will plant 100 feet of drill.

Bountiful Beans

Bountiful—First in Spring—The Last in Fall. Absolutely Stringless—Continuous Bearer.

This superior variety was first introduced by us in 1910, and our customers have grown it everywhere and it has become exceedingly popular wherever grown. It is a distinct variety and improvement in the green Bush Bean. We cannot praise it half high enough. The plant is remarkably handsome, being practically rust and mildew proof. It is very hardy, extremely early, very prolific, and bears continuously longer than any other variety—is the first to produce pods fit to pick in the spring, and the last to yield edible pods in the fall; in fact, frost usually finds mid-summer-sown plants still in pod and blossom.

But the crowning merit of this grand Bush Bean is in the rich green pods which are of immense size, thick, broad, extra long, very uniform in shape, solid, meaty and of high quality, tender and delicious flavor exclusively their own; moreover the pods are absolutely stringless and entirely free from tough membranous lining, not only when young, but tender "snap brittle" quality is retained even into maturity.

In addition to other merits of Bountiful as a snap Bean it is most excellent shelled after it is ripe for winter use.

This variety, while unrivalled in its class for the home garden, is also in great demand among the truck growers. Its handsome appearance and superior quality holds our customers everywhere.

PRICE: Large packet, 5c; ¼ lb., 15c; 1 lb., 50c; 3 lbs., \$1.35; postpaid.

New Stringless Green Pod Now one of the most popular bush beans in America. In point of earliness it ranks among the first; in quality it is excelled by none, and in bearing ability it stands without rival.

The pods are round, fleshy and nearly straight; are borne in abundance through a long season, beginning early. They are five inches in length, rich green in color, very tender, and of highest flavor. They remain long in edible condition. The bean is unexcelled for home use, and will be found very profitable on account of its heavy cropping ability.

PRICE: Large packet, 5c; ¼ lb., 15c; 1 lb., 50c; 3 lbs., \$1.35; postpaid.

New Green Pod Refugee or 1,000 to 1

Very popular; enormous yield. For more than 20 years the originator of this variety has been working to eliminate the string of the old Green Pod Refugee. In this new bean he has succeeded, and we are glad to be able to offer our customers this Stringless Refugee. Its habit of growth is practically the same as the old Thousand to One Refugee, but maturing its beans earlier. Very productive; of true bush form; attains a height of eighteen inches. The handsome, round, green pods average about 5 inches long and are brittle, tender, fleshy and perfectly stringless. Its quality is superfine; beautiful green color, entirely stringless, makes it superior to any other variety. Very popular with canners.

PRICES: Large packet, 5c; ¼ lb., 15c; 1 lb., 50c; 3 lbs., \$1.35; postpaid.

Write for peck and bushel prices on beans.

Burpee's Stringless Green Pod

This famous Bean is unequalled! It combines hardness, earliness and wonderful productiveness, with pods of finest quality. Early plantings may be made to produce the earliest crop.

By repeated plantings pods may be had in constant succession from spring until frosts in the fall. The pods are the finest in quality, of a rich green, round and straight, five inches long, solidly meaty and broad.

PRICES: Large packet, 5c; ¼ lb., 15c; 1 lb., 50c; 3 lbs., \$1.35; postpaid.

Write us for peck and bushel prices on beans.



Stringless Green Pod Bush.

Longfellow Beans

**Remarkable Early
Exceedingly Prolific**

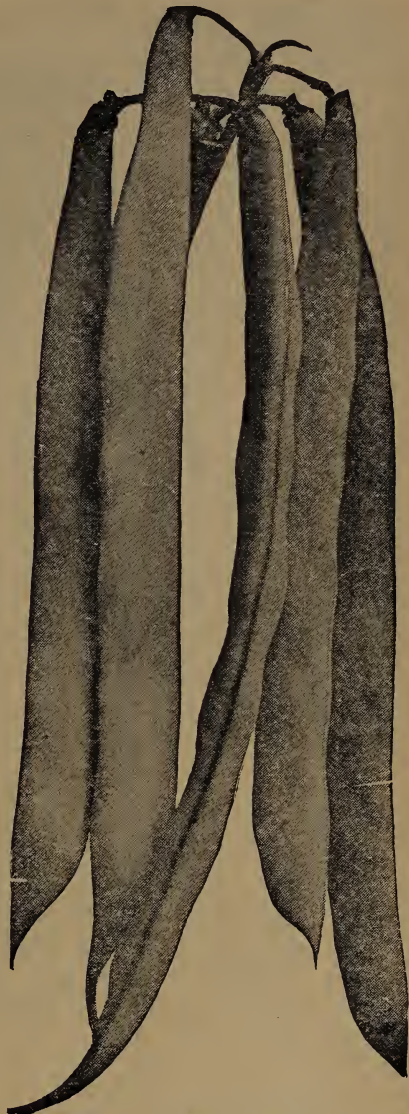
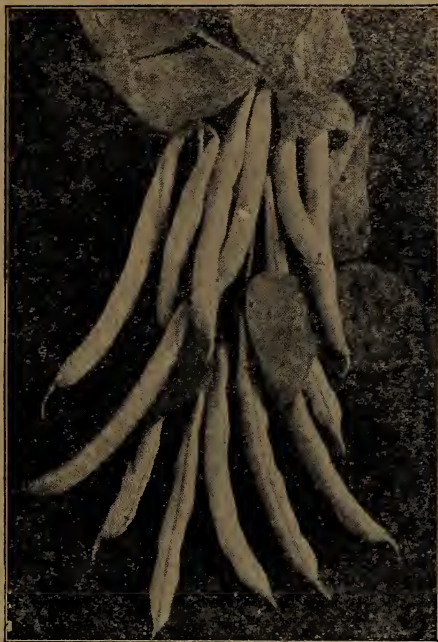
An extra early bush bean of fine quality producing a fine crop of long, round, green pods averaging 6½ inches long, always solid, tender and of delicious flavor. The plants are unexcelled in bearing qualities, extra early; ready to pick in advance of any other variety. (See cut.)

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

**Improved Earliest
Valentine**

Our famous strain of this famous, reliable, green podded bush bean is ready for the basket in 35 days. It has full, meaty, round pods, which possess tenderness and superior flavor. Plants grow 15 inches in height and is the most prolific bean of its kind.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.



Early Longfellow.

Wax Podded Varieties

Wardwell's New Kidney Wax

Most Profitable Market Gardener's Shipping Bean.

This bean is entirely distinct from that of other Wax varieties; perfect kidney-shape. Most prolific variety; one of the earliest and most hardy. Pods long, flat, waxy yellow, brittle and stringless. Desirable for every climate. Can be grown with great profit in the South for early shipment North.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.



Wardwell's Early Kidney Wax.



Dwarf Black Wax

This is fully one week earlier than any other Wax Bean. There are none better for first early crop.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Improved Black Wax

(Dwarf German Prolific.) This bean originated from the old Black Wax and is a great improvement over its parent. One of the earliest of all the wax beans and very productive. The pods are from 4 to 5 inches in length; usually slightly curved, quite round, brittle and stringless.

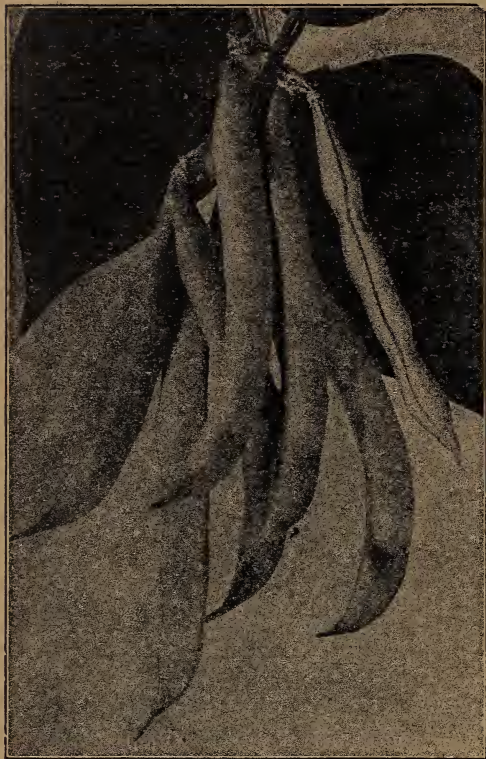
PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Davis White Kidney Wax

A very showy variety, and is largely grown for canning factories. The pods are a clear white color, plump, full and rust proof, or as nearly so as any bean may be. This is an excellent variety, but it does not retain its tenderness as long as our Kidney Wax.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Write us for peck and bushel prices on beans.



Golden Wax.

The Tapary Beans, the Great Dry Weather Bean

This is the bean that was discovered at the foot of the mountains in the arid regions of Arizona, where the rainfall is but 9 inches during the whole year. It was discovered by Robert W. Clothier, of the University of Arizona, who traveled 1,300 miles in a wagon, through Arizona, studying the possibilities of Dry Farming and seeking to learn what crops were best suited to the dry climate of the Southwest. These beans were taken to Tucson to the agricultural experiment station, in 1908, where they have been grown with great success since that time, but it is only now that we have been able to obtain sufficient seed to justify us in cataloging them; however, have grown them here the past two years in a limited way, in order to test them out, and they have, here as elsewhere, proven one of the best, most nutritious beans of all previous introductions. They are a white bean, very much resembling the Navy Bean, although not as large in size, but of all the producers they take the cake over all. They are not only one of the finest Navies for table use, but also quite equal to Field Beans and Peas for stock—for hay and forage. They also resist dry weather beyond any comparison with others, and are the quickest to mature, time of

Beans--Bush Varieties--Cont.

Improved Rust Proof Golden Wax The Standard Wax Variety for General Use. It would seem that the ideal in Wax Beans had materialized with this improved type. It is the highest strain of Golden Wax yet produced and we voice the expressions of thousands of delighted customers when we state this seed of Selected Golden Wax is distinctly in a class of its own.

Gardeners find this selected seed highly meritorious on account of its earliness, splendid shipping qualities and strikingly handsome appearance. The pods are oval, a trifle straighter than the old types of Golden Wax, very brittle, stringless, superb, of luscious flavor. About 5 inches long, deep rich yellow color. The plants are dwarf, thick stem, growth very rapid maturing.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

New Kidney Wax We have realized the importance of a pure white, tender bean for canners' purposes, and in this new Kidney Wax we believe we have just what the people have been looking for. The beans being pure white, present the most attractive appearance when cooked. The fresh pods remain tender longer than those of any other variety. It is as heavy a yielder as the Davis White Wax and of a superior quality. The pods are straight, of a bright lemon yellow, brittle, meaty and entirely stringless at all stages of growth. It is the very bean the canners and truckers have been seeking for years, as it combines quality and quantity, which can be used as a string bean until large enough to shell, while the seed, being large and pure white, is most desirable for shell beans, both for summer and winter use. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Challenge Black Wax The pods are very fleshy, round and saddle-backed with only slight strings. Bushes grow uniform, about 15 inches in height, and produce a large crop. It is an old standard and one of the most profitable sorts for private use or market.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

maturing being full 30 days ahead of the White Navy Bean. Thus they can be successfully grown if planted in Iowa or Nebraska as late as July 10.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Choice Navy Beans Our stock of this well-known variety has been carefully selected and cleaned and will be found far superior to beans commonly offered as "Navy Stock." **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00, postpaid.

Prolific Tree Bean Earliest, hardest, most productive and most profitable field bean in America. It averages 40 bushels per acre. It ripens early, and in a wet season remains sound and healthy where other varieties rust and spot. The ripened seed is pearly white, and is much handsomer than other sorts, consequently command top prices. **PRICES:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00, postpaid.



Burpee's Improved Bush Lima Beans

Bush Limas

Are especially desirable for the home garden, as a good supply of Lima Beans may be produced without the expense of furnishing poles, and the Bush Limas come into bearing two or four weeks earlier than the pole varieties of similar type. The planter should bear in mind that the bean plant is a strong grower, and the soil should be made very rich to enable the plants to produce a good crop of beans. See next page.

Dwarf or Lima Beans Continued

Burpee Improved Lima Pods are truly enormous in size—borne abundantly and well filled with handsome beans which are both larger and thicker than those of the popular Burpee's Bush Lima—and fully eight days earlier! It differs from the best strains of Burpee's Bush Lima in having uniformly much larger pods, producing more beans, while both pods and beans are not only larger in size but also considerably thicker. The growth is even more vigorous, with heavier foliage. The plants are uniformly upright. Full-grown bushes measure thirty

inches in height and twenty-four inches across the top. The blossom bearing stalks are thrown well out from the foliage and the pods are borne frequently in what might be called "clusters" of from five to eight. The pods measure five to six inches long by one and one-quarter inches wide. Even when of full size the enormous beans are of the most luscious flavor; they are thin skinned and truly delicious; they are ready to market eight to ten days earlier. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

IMPROVED
HENDERSON
BUSH LIMA
BEAN



Henderson's Bush Lima Beans

Magnificent dwarf growing Lima; very early, of a delicious flavor, extremely productive and should be planted in every garden in America. It's early. It's fine. It's just the thing for a family garden. It is wondrously prolific. A package or a pound will furnish sufficient for a good sized family. It is one of those beans that can't be improved upon.

PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

New Fordhook Bush Lima

Fordhook Bush Lima is altogether different from the Burpee Improved, as it belongs to the potato or "fat" class of Limas. The shelled beans are much thicker and more blocky in shape and are crowded so closely in the pods they are flattened on the ends. Pods are large, 4 to 6 inches long, containing 4 to 5 beans. Even when of full size are tender, juicy and sweet flavored, like large, flat Limas, being much better in quality than any other Potato Lima.

PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

Large White Lima

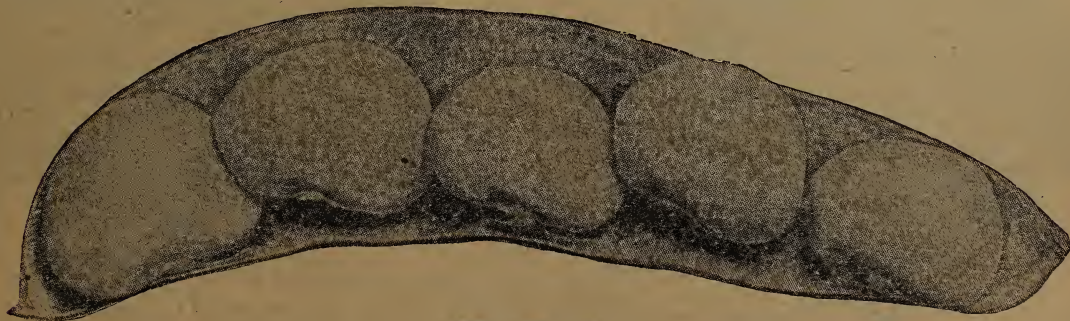
A strong grower and uniformly large podded. The pods frequently contain five to six large beans. These beans are of excellent quality, easily shelled; of large size and handsome appearance.

PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Dreer's Bush Lima Bean A Standard Late Variety Everywhere. One of the Most Popular Limas Grown. Despite the eulogies and many claims set forth for other meritorious Limas of the newest introduction as well as the older sorts, thousands upon thousands of individuals refuse to part with this magnificent type.

Dreer's has for years held undisputed supremacy among Limas. Admittedly true that it has divided honors of late with new innova-

tions it is still extensively grown owing to its being a fine "follow up" or late variety and unusually heavy in productiveness. Dreer's is exceptionally sweet and succulent with a taste decidedly its own. In fact, this Lima has the reputation of being sought for its flavor more than any other. Does well anywhere and much better than most sorts in dry weather. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.



Dreer's Bush Lima.

Pole Beans

The Pole or Climbing beans are more tender, and require more care in culture than the bush varieties. They should be planted about two weeks later and will succeed best in sandy loam.

Each packet of Pole Beans will contain 2 ounces and will plant 15 to 20 hills. A pound will plant about 100 hills.

Kentucky Wonder or Old Homestead We can recommend this as one of the earliest and most satisfactory of all Green Podded Pole Beans, and unsurpassed for using in the green state. It is enormously productive; the long, silvery, green pods hanging in great clusters from top to bottom of the pole. While young the pods somewhat resemble the popular old Refugee. This is the best and most profitable bean for the market gardener, the pods being so showy and produced so abundantly. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

Lazy Wife Pole Bean The pods are produced in great abundance and measure from 6 to 8 inches in length; they are broad, thick, very fleshy and entirely stringless. The pods retain their rich, tender and stringless qualities until nearly ripe, and are unsurpassed in all stages. Each pod contains 6 to 8 round white beans, which make excellent winter shell beans. They are late to mature, but are valuable to extend the season. This is an excellent bean, and is sure to give satisfaction.

PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

White Dutch Case Knife Yields an immense crop of handsome, flat white beans of excellent flavor. Cooks easily. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Red Speckled Cut Short or Corn Hill An old variety, very popular for planting among corn. It will give a good crop without the use of poles; vines medium, twining loosely, with dark colored, smooth leaves and white blossoms in small clusters; pods short, cylindrical and tender; beans nearly oblong, cut off diagonally at the ends; white, covered at one end and slightly over the surface with reddish-brown dots. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

Horticultural Pole Bean The finest baking beans with pods six inches long; good either as a snap or for shelling. The mammoth pods are beautifully striped and splashed with brilliant carmine. Very showy and attractive and the immense beans are of the finest quality. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Giant Podded Lima This, the largest podded and heaviest cropper of all the Limas. It is earlier than King of the Garden and a heavier yielder. A very vigorous grower, the vines attaining a height of 10 to 12 feet, excelling in this respect all other Limas. We have been breeding this type for four years at the trial grounds and offered it in the catalogue for the first time last year. It is the largest podded, the largest seeded and most productive of all Lima Beans. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

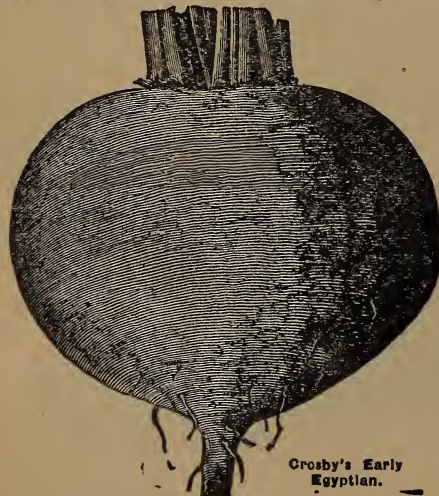
Lima, King of the Garden This old standard sort is one of the best for main crop. It is vigorous in growth and immensely productive. The vines begin to produce pods near the foot of the pole, and the bearing season continues without interruption until frost. The pods are large, numerous and well filled. The beans are of mammoth size and uniform. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Select Table Beets

One ounce will sow 50 feet of row. 5 to 8 pounds for an acre.

CULTURE: The best results are obtained on a deep, sandy loam. For general crop sow as soon as the ground will permit in drills 18 inches apart and thin out 4 inches in the row. For winter use the turnip varieties may be sown in June, and the beets may be

kept by storing in a cellar and keeping covered with sand or sandy soil to prevent wilting, or they may be kept outdoors in pits such as are used for apples and potatoes. One or two ounces, or single packets of two or three sorts, will give a good supply for a large family. It is best to sow in freshly prepared soil, which should be pressed firmly over the seed.



Crosby's Early Egyptian.

Crosby's Egyptian

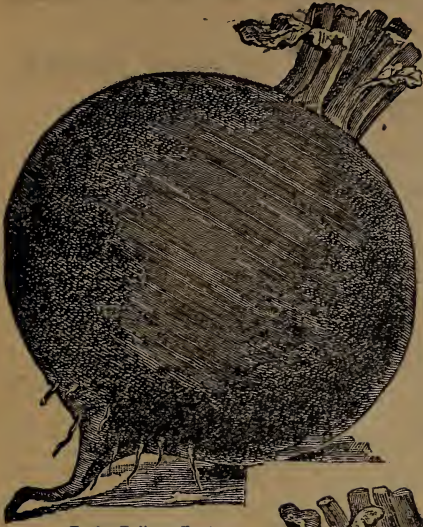
A distinct improvement on the older forms of Egyptian beet, with a larger and more globular root. It is extremely early, and is smoother and of better color and quality than the original sort. Produces a most desirable beet of presentable size and shape, very early, making it a favorite with the market gardeners. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.



Egyptian.

Dark Red Egyptian The Egyptian beet is one of the most popular varieties among market gardeners for forcing purposes. Justly or unjustly it is considered to be the earliest of all. It certainly will bear close planting in the valuable space under glass or in a warm garden in early spring. It is turnip shaped, and when young is crisp and tender. In color it is dark red. To gardeners having a preference for Egyptian, we offer the best strain. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Select Table Beets--Continued



Early Eclipse Beet.

Early Eclipse Beet

Is one of the best known of the table beets, and we have a strain of extra purity and merit, particularly noted for earliness. It is indeed high praise to say that our Eclipse Beet is almost or quite as early as Egyptian, for the latter has been long accepted as the earliest of all; and Eclipse has ever been recognized as superior to Egyptian in table value. Our strain has small top and is smooth, fine grained and tender, with bright red color. Many market gardeners have discarded Egyptian entirely in favor of Eclipse. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Extra Early Dark Beauty

One of the earliest ever grown. Beautiful oval shape, and the color is a rich dark red. Flesh is fine grain and cooks tender; rich and sweet. Its flavor is superb, free from side roots and smooth and is very beautiful in market. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$1.75; postpaid.

Detroit Dark Red

This splendid second early variety is highly recommended for market and private gardens. Roots are globular, very smooth with short tops; skin blood red; flesh dark blood red, sweet, tender and delicious. The tops are small and upright in growth. Especially fine for market bunching. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$1.75; postpaid.



Early Blood Turnip Beet.

Early Blood Turnip Beet

The Early Blood Turnip Beet is one of the old stand-bys and still retains its position at the head of all the best table beets there is grown. It is very early, nearly as early as Egyptian, and greatly surpasses that variety in flavor. The roots of the Blood Turnip Beet are nice large size and grow uniformly perfect, nearly globe shape, with a slim tap root. The leaves are small, colored dark crimson. The color is blood red and quality excellent, flesh being tender, rich deep crimson and fine flavor. Makes a splendid appearance and an excellent seller on the market. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50; postpaid.



Market Gardeners' Beet

This is the ideal beet for market gardeners and the home garden. It is very symmetrical with small tap root and but few fibrous roots; color outside is deep blood red; inside, layers of blood red and light red alternately. When cooked they are a beautiful dark red throughout, fine grained and unsurpassed in quality. It continues to grow until late in the fall, attaining a large size and making a good selling and eating beet for winter. One sowing only is necessary to produce early beets for market and main crop for winter use. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$1.75; postpaid.

Crimson Globe

A grand second early and main crop variety. This variety has become remarkably popular among gardeners in all sections of the country and needs no recommendation to those who have grown it. It is of medium size, generally about 3 inches in diameter, very handsome in shape, a little deeper than round, with a smooth, even surface. The leaves are rich crimson in color, borne on slender stems, which grow quite compactly, and are thus easily removed. The flesh is deep crimson, ringed and zoned in varying shades. It is exquisitely tender, and delicious in flavor. Though it grows quickly enough for very early use, it will remain tender for a long period. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$1.75; postpaid.

SWISS CHARD (FOR GREENS)

Better Than Spinach—Silver Ribbed.

A variety of beet grown exclusively for its large, juicy, tender, light-colored leaves and leaf stalks, which are much superior to those of other beets for use as greens. Later in the season the broad, flat, wax-like leaf stems are cooked or pickled. This variety is worthy of a place in every garden. Known also as Silver or Spinach Beet. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.75; postpaid.



The above is a typical illustration of the Mammoth Long Red Mangel stock of Beet.

Sugar Beets

FOR STOCK FEEDING

Giant Half Sugar Mangel This is a hybrid or cross between the Mammoth Long Red Mangel and Sugar Beet, and for our own feeding we have found it superior to either. Being sweeter, both hogs and cattle relish them. **PRICE:** Oz., 10c; ¼ lb., 25c; lb., 75c; 3 lbs., \$2.10; postpaid.

Giant Sugar or Half Sugar Rose Very similar to Giant Hal Sparl except in color. The skin is bright rose above ground and white below. Flesh white, sometimes tinged with rose. Roots grow half out of ground and easily harvested. **PRICE:** Oz., 10c; ¼ lb., 25c; lb., 75c; 3 lbs., \$2.10; postpaid.

Sugar Beets—For Sugar Making

Klein-Wanzleben Also called Diamond Sugar Beet. This variety is cultivated on a larger scale for the best sugar factories than any other, as it usually yields 15 to 20 per cent of sugar. Root is of straight shape, tapering evenly, and somewhat screw shape. Our seed is grown from beets which were tested as to per cent of sugar before setting out. The heavy per cent of sugar makes it also of great value for feeding. **PRICE:** Oz., 10c; ¼ lb., 30c; lb., 90c; 3 lbs., \$2.50; postpaid.

Imperial White French Undoubtedly the most highly developed variety for sugar making. Roots of medium size, white skin with tinge of gray, half long and very uniform in size and shape. Flesh white and very rich in sugar. **PRICE:** Oz., 10c; ¼ lb., 30c; lb., 90c; 3 lbs., \$2.50; postpaid.

Vilmorin-Elite This beet is the result of thirty-five years of methodical and persevering selection. In black soils, rich in organic matter, it gives results equal to any other variety. Its average yield may be stated as from 12 to 16 tons per acre. **Oz., 10c; ¼ lb., 30c; lb., 90c; 3 lbs., \$2.50; postpaid.**

Mangel Wurzels Beets FOR STOCK FEEDING

A Money Making and Money Saving Crop

Mangels are the most important of all root crops for stock feeding purposes, as has been proven by many state experimental stations, and by thousands of prosperous dairymen and stock growers, who feed them largely. No crop pays better for the stockman to grow than Mangel Wurzel Beets. The value of these for stock feeding cannot be overestimated. The results from their use are wonderful, as is clearly shown in the improved health and conditions of the animals to which they are fed, the increased yield of milk in the cows, and the great saving of hay. When the fact is considered that 50 tons of Mangels can be grown on a single acre at a small expense, the wonder is that every farmer does not grow them. The owner of even one or two cows should grow a sufficient quantity to provide fresh food in winter, when green food is not obtainable. They are as important to the dairy and stockman of this country as corn is to the hog grower. If you have never grown them, give them a trial this season; you will find them a profitable crop.

CULTURE: Mangels require a deep soil in order to do well. Sow from April until June in rows 18 inches to 2 feet apart, and thin to 8 to 12 inches apart. If you prefer large Mangels, thin to 12 inches apart; if medium size wanted, 8 inches apart. Cultivate same as Sugar Beets. Sow 6 to 12 pounds to the acre according to width of rows.

Improved Mammoth Long Red This is the best long red mangel. It is enormously productive, yielding from 50 to 60 tons per acre and a single root often weighing from 25 to 35 pounds or more. They are of good and massive shape, of very fine texture and good quality, and though growing to immense size, are not coarse. Dark foliage, with skin bright red, flesh white, veined with rose pink. Roots, though solid, are easily harvested, as they grow well above the ground. Our strain of this variety is the best on the market. **PRICE:** Oz., 10c; ¼ lb., 30c; lb., 90c; 3 lbs., \$2.50; postpaid.

Golden Tankard Mangel A special feature is the rich, deep yellow color of the flesh, differing in this respect from other Mangels, surpassing them in milk producing qualities. All kinds of stock thrive on this variety. The roots are of large diameter, tapering quickly at the bottom, which is quite broad, with only a small tap root. It grows largely above the soil and is easily harvested. It yields an enormous bulk on good land, and can be grown closely in rows. **PRICE:** Oz., 10c; ¼ lb., 30c; lb., 90c; 3 lbs., \$2.50; postpaid.

Crimson Tankard

In appearance it closely resembles the favorite Golden Tankard. It is adapted to all soils, is easily lifted from the ground and is a very productive sort.

PRICE: Oz., 10c; ¼ lb., 30c; lb., 90c; 3 lbs., \$2.50; postpaid.



Golden Tankard Mangel.

Garden Carrots

One ounce to every 100 feet of drill.

CULTURE: For the best results the soil should be well worked to a good depth. For early use sow seed in rows 15 inches apart as early in the spring as the soil can be worked, sowing about 4 pounds of seed per acre and cover the same with one-half inch of soil; but for main crop sow about corn planting time, using 3 lbs. of seed per acre, and the seed should be covered with nearly an inch of soil. One ounce of seed will sow 100 feet of drill. Make the rows two feet apart to allow for horse cultivation. Keep free from weeds and cultivate occasionally until the roots are large enough for table use, and if grown for commercial purposes they may be cultivated with profit throughout the season.

When the plants are 3 inches high thin to 3 inches apart in the row.

Golden Beauty This is a half long stump rooted carrot, of a deeper color than Danvers; is a heavy cropper and suitable for both table and stock. This carrot grows a smooth, handsome, uniform root; free from core, sweet and tender, never becomes stringy. On account of the immense yielding qualities, this carrot is desirable for market gardeners or any private garden and with ordinary care it will yield from 30 to 40 tons per acre. We advise our customers to plant liberally of it. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

The Chantenay This variety is a very productive one. It has an extra large shoulder, is easily dug, and is desirable in all respects. It is a stump rooted sort, very smooth, fine in texture and of a beautiful rich, orange color. For table use it is considered by many to be the best of all, both on account of shape and quality. The flesh, when cooked, is very tender.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.75; postpaid.



Ox Heart or Guerande

We do not hesitate to call this the most valuable variety in existence. Tops small for the size of the roots, which are comparatively short, but often reach a diameter of five inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This variety is specially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. When young the roots are excellent for table use and when mature are equally good for feeding stock.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.75; postpaid.



Improved Long Orange

(Pointed Rooted.) The standard late variety; very handsome and uniform in shape; deep orange color; good flavor; yields very heavily. Requires a deep soil; plants should stand 8 inches apart in 18-inch drills for roots to attain their full size.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Early Scarlet Horn

The favorite extra early variety. Very early; color orange-scarlet; fine grained and agreeable flavor. Tops small; has a short, stump-shaped root; grows well in shallow soil. The best early variety for table use.

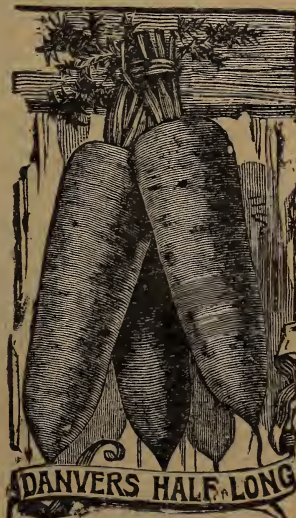
PRICE: Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.75; postpaid.

Golden Beauty

Illustration



Danver's Half Long A popular standard variety of rich, dark orange color. Oxheart and Long Orange, and wonderfully productive. Under special cultivation it has yielded from 20 to 25 tons per acre. One of the finest varieties in cultivation. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.



The World's Celebrated Mastodon Stock Carrot

Every Farmer Should plant a few acres of carrots for stock food; they are very productive, less liable to disease than many other root crops, and being sown earlier, do not interfere so much with the labor in the busy time.

The Mastodon Carrot is the heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is white, crisp and solid and very sweet in flavor. It is a vast improvement on the white and green Belgian sorts which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are very heavy at the shoulder, rendering them easily harvested. An important feature, also, is that they do not break in pulling or sorting. Too much can scarcely be said of their size and great productiveness. The roots frequently measure 15 to 20 inches in circumference, and 20 to 40 tons to the acre is not an extravagant statement as to yield. It is not a carrot for the market gardener, but it is emphatically the carrot for the farmer, and once used, nothing else will take its place. Plant same as Mangel Wurzel beets, but may be planted two to four weeks earlier, or even as late. Requires but 2 pounds seed per acre.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Long Lemon Carrot

A very large and a very rich stock carrot. We can say that there is no yellow carrot which can approach the Long Lemon in size, in yield and in feeding qualities. It is the largest and best Orange or Yellow Carrot known. The roots are remarkably fine, very symmetrical and of excellent quality, possessing high feeding properties. It is a heavy cropper on all soils, but is especially adapted for rich strong land. It grows nearly half as much weight again an acre as the ordinary varieties, and as the roots grow more above the ground it is much easier to gather the crop. This grand variety is sure to suit everyone who grows it.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75; postpaid.

Improved White Belgian Carrot

Exclusively a Stock Feeding Carrot.

Everywhere comes the cry, "Greater production at less cost," to the agriculturist who is sincerely striving to his utmost to eliminate waste and extravagance, to introduce efficiency and economy we commend Improved White Belgians. This is the universal Stock Carrot of Belgium, noted for its industrious, frugal, thrifty farmers. In that country in peaceful times it would be difficult to find a farm without a crop of White Belgian Carrots. The popularity of this great carrot is due to its many qualities of merit. Dairymen particularly prize it for its great amount of saccharine; the flavor imparted to the milk; the avidity with which cows devour it; its immense yields; its ease of cultivation; its easy harvesting and remarkable keeping quality. This carrot is generally conceded the superb length for universal cultivation. It has a thick crown, with very little core, finely grained, creamy white flesh, attractive appearance, comparatively free from side root and very sweet and tender.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.40; postpaid.

Improved Yellow Belgian Carrot

This variety is planted very extensively. It is very hardy and very productive. The roots are at least six times as long as broad, pale orange underground, and green above. About one-fourth to one-third grows above the ground. Keeps well and is very nutritious.

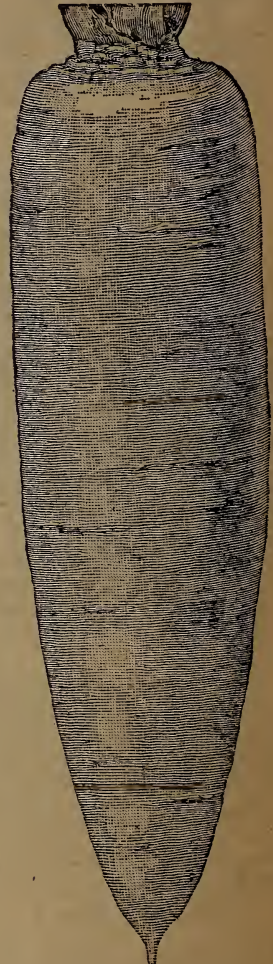
PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.40; postpaid.

Mastodon Carrot.

20 to 40 tons per acre, which equals 700 to 1,400 bushels per acre and when fed with corn is equal to it bushel for bushel.

Reduced in Size.

Important.—Owing to the large size which these carrots attain, less seed is required to the acre than of any other sort—2 pounds an acre being sufficient.



LONG LEMON
STUMP-ROOTED CARROT.



EXTRA EARLY SORTS

CULTURE: To grow cabbage successfully, first secure good seed, as the quality of the seed used is of the greatest importance.

For early use, sow seeds of the early varieties in hotbeds, the latter part of January or first of February. For second early, sow in hotbeds in March and April. For late cabbage, sow out of doors the latter part of April or first of May. It is important that plants be set down to the first leaf, so that the stem may not be injured in case of frost. Be careful not to cover the heart of the plant. As they advance in growth, draw a little earth to the plants until they begin to head.



A detailed black and white woodcut illustration of a large, mature head of lettuce. The leaves are tightly packed, showing a complex network of veins and a ruffled, wavy texture. The central core is visible, and the overall shape is somewhat rounded and dense. The illustration is set against a plain, light background.

A dark, circular, heavily textured object, possibly a fossil or a piece of ancient material, showing intricate patterns and a rough, irregular edge. The surface is covered in fine, intersecting lines and larger, irregular patches, giving it a complex, almost crystalline appearance. The edges are uneven and jagged, suggesting a natural, unprocessed state. The overall color is a deep, mottled black or dark grey.

Early All Head.

Ideal Best Late

Cabbage in Existence



Ideal Cabbage You are no doubt looking for the BEST Late Cabbage there is grown. If so, don't look any further. We regard Ideal as the BEST or at least one of the best in existence. Its shape and general aspect are correctly illustrated above. It is a sure heading variety and can be depended upon to head 999 good, solid heads out of every 1,000 plants that have been well started, averaging 16 to 20 pounds. It is unequalled

for cooking or slicing and is an exceptionally fine winter keeper. We can fully recommend this Ideal cabbage to our customers everywhere and earnestly hope every cabbage grower will give it a trial. All our cabbage seeds were saved from the most choice selected heads and cannot be beat or equalled in excellency anywhere, at any price. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.



Large Drumhead

A favorite winter variety. Heads are solid and of good texture and have very few loose leaves, allowing of planting closely in the field. **PRICE:** Large packet, 10c; oz., 55c; ¼ lb., \$2.00; postpaid.

Large Drumhead.

Autumn King Our Autumn King is a distinct variety and produces enormous, large, solid heads. The outside leaves are small and close up neatly to the cabbage head; thus can be planted closer together than ordinary sorts, which enables them to produce a greater weight to a given amount of land than other varieties — are a splendid keeper. **PRICE:** Large packet, 10c; oz., 55c; ¼ lb., \$2.00; postpaid.

Flat Dutch Our strain of the Premium Flat Dutch Cabbage cannot be excelled anywhere. Heads average 16 to 20 pounds, measuring 1 to 18 inches in diameter. Specially grown heads often weigh 5 pounds. Without exception one of the best winter keepers. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

Mammoth Red Rock The best variety of late red cabbage. It's sure heading, large size, solid as a rock and will please anyone who want the best red cabbage. **PRICE:** Large packet, 10c; oz., 80c; ¼ lb., \$2.75; postpaid.

Hollander Cabbage

(The genuine stock.) This is the most remarkable cabbage yet produced. In fact, it illustrates the truth that "merit will win." While it was introduced only five years ago, it has become the favorite with all who have tried it. The heads are very solid and average about 8 pounds in weight; in point of quality they have no superior and keep better than any other sort, the head being as solid and perfect when taken up in the spring as when put away in the fall. **PRICE:** Large packet, 10c; oz., 80c; ¼ lb., \$2.75; postpaid.

Celery

ONE OUNCE WILL PRODUCE
ABOUT 6,000 PLANTS.

This we consider one of the luxuries of the garden. For first crop sow the seed early in hotbeds, or in boxes in the house, in rich, moist soil, covering the seeds very lightly. For main crop sow seed in open ground in April or as soon as the soil is in good condition. Seed germinates slowly and if weather is hot and dry protect with light covering of hay or straw. Stir soil as soon as plants are well up; thin out and transplant so that they stand about an inch apart in the row. If they grow too rapidly shear the tops off when about four or five inches high and this will make them more stocky. For main crop set plants out between June 15 and July 15 in rows three feet apart and the plants six inches apart in the row. Care should be exercised to firm the earth well around plants when setting and they will root better. Keep clear of weeds until about the middle of August, when it will be time to begin earthing up. Draw the soil against plants as closely as possible, firming it enough to keep plants in an upright position. Late in the season the bleaching process must be finished by digging the soil from between the rows and banking it clear to the tops on each side of the row of celery. Much labor is saved by growing the self-bleaching varieties, but they do not keep as well for winter use.



Golden Self-Blanching. By far the Most Popular Sort.

Golden Self Blanching

This is without doubt the most popular celery grown. It is a SELF-BLANCHING sort with little banking or covering. The outer ribs assume a beautiful golden yellow color, while the "heart" or vine stalks are deliciously tender, brittle and sweet. We offer two strains of this variety, viz., "PRIVATE STOCK" and "REGULAR" stock,

and for the following reason: Some years ago we procured from a celery grower in France some seed of the Golden Self-Blanching variety. That year there happened to be a good deal of trouble in many parts of the country with California grown seed of the Golden Self-Blanching celery; it did not blanch as well as usual, nor was the seed as pure. Our customers, of course, noted the difference in the quality between the French stock and the California stock, and have since insisted on having our French grown seed, no matter what the difference in price. In fact, we have on several occasions, when the French stock of seed was very scarce and high in price, sold it readily at from \$15.00 to \$25.00 a pound, when we were only asking \$3.00 a pound for the best California seed.

OUR PRIVATE FRENCH STOCK. PRICE: Large packet, 15c; oz., 90c; ¼ lb., \$3.25; postpaid.

Regular Stock

PRICE: Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

White Plume

Stalks, inner leaves and heart white and fit for use by simply tying up closely with soft twine. More used than any other variety by market gardeners. Our seed is of the highest quality and sure to please all.

PRICE: Large packet, 5c; oz., 30c; ¼ lb., \$1.00; postpaid

Giant Pascal

Solid, crisp stalks of incomparable flavor. Strong growth, producing perfectly bleached stalks when hilled up properly. Of rich, nutty flavor. Blanching easily and is very brittle. A fine keeper, an excellent shipper, retaining color and fresh appearance a long time. A favorite with southern growers. For mid-winter and early spring use it is excellent.

PRICE: Large packet, 5c; oz., 30c; ¼ lb., 90c; postpaid.

CELERIAC

Large Smooth Prague.

An improved form of turnip-rooted celery excellent for soups and stews. Produces roots of nearly globular shape and comparatively smooth surface.

PRICE: Large packet, 10c; oz., 40c; ¼ lb., \$1.25; postpaid.



White Plume.

Chicory

Root used when dried as a substitute for coffee; the sprouts when forced in the dark are used for salads. **CULTURE:** Sow in spring, in drills 18 inches apart, one-half inch deep.

Witloof Chicory or French Endive

The famous winter salad so popular in first-class restaurants. Forms leaves like Cos lettuce and can be eaten raw as salad or boiled. Being available in winter will make a profitable crop. Cultural directions on each package. **PRICE:** Large packet, 10c; oz., 40c; ¼ lb., \$1.50; postpaid.

Chervil

Curled. Treat like parsley. A valuable flavoring herb. **PRICE:** Large packet, 10c; oz., 30c; ¼ lb., \$1.00; postpaid.

Collards

(One ounce will produce about 3,000 plants.) Collards are largely used as "greens" in some parts of the country, especially south. They are a form of loose-headed cabbage.

Georgia

The most satisfactory for general use. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 35c; postpaid.

Corn Salads

Broad Leaved, Large Seeded. A delicious salad used during the winter and spring as a substitute for lettuce, and also cooked and used like spinach. It will mature in six weeks. Sow in early spring in drills a foot apart, or for winter use sow in September and winter over like spinach. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 35c; postpaid.

One ounce will sow 18 sq. ft. and 6 lbs. will sow an acre.

Cress

All the types described below are grown for the refreshing piquancy of the leaves, being used as an appetizing salad or for garnishing various dishes. One ounce will sow 200-foot row.

Early Curled

Well-known salad. Sow at intervals all season. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 35c; postpaid.

True Water

Sow seed along the border of running water. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.90; postpaid.

Upland Cress

A perennial variety; hardy, produces well; same flavor as Water Cress. Grown on high, dry land; does not run to seed rapidly. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.90; postpaid.

Broccoli

(One ounce will produce about 3,000 plants.) Growth and habit like the cauliflower, except that it is more hardy, and the heads are not as compact. Not desirable for warm or dry countries, but of special value in the north. Cultivate and use the same as cauliflower. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.60; postpaid.



Cauliflower

(One ounce will produce about 3,000 plants.) One of the most delicious of vegetables. Cabbage and cauliflower requirements are quite similar, except that the latter needs a cool and moist atmosphere and should be watered in dry weather. As the flower heads, the large leaves should be broken down over them to shield them from sun and rain.

Danish Dry Weather A strong competitor for first place. Heads extra large, pure white and very solid. Has large leaves which protect the head. About 10 days later than Snowball, but has proven more desirable for growing in open ground and does well in dry seasons when other varieties show failure, keeping plump and fresh during the hottest, driest weather.

PRICE: Large packet, 25c; ¼ oz., 90c; oz., \$3.00; postpaid.

Early Snowball Considered the earliest and more certain to make a head than any other sort. Its dwarf habit and short outer leaves allow it to be planted as close as 18 to 20 inches apart each way, thus making it especially valuable to market gardeners. Our stock is extra choice, and cannot be excelled. We believe it to be the best in the world.

PRICE: Large packet, 25c; ¼ oz., 90c; oz., \$3.00; postpaid.

Extra Early Dwarf Erfurt Is valuable for forcing. A very popular variety. First quality.

PRICE: Large packet, 15c; ¼ oz., 60c; oz., \$2.25; postpaid.

Early Paris Well-known small sort which is usually quite satisfactory.

PRICE: Large packet, 10c; ¼ oz., 50c; oz., \$1.75; postpaid.

Cucumbers

(One ounce will plant 50 hills, two pounds will plant one acre.)

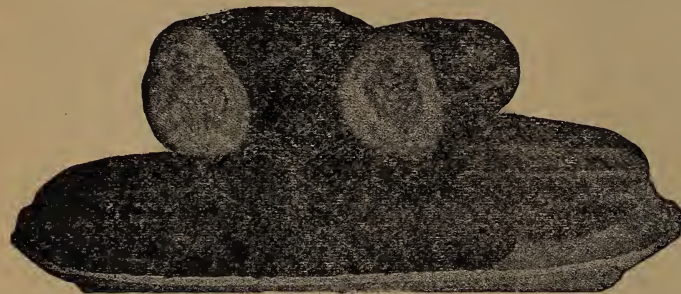
Cucumbers succeed best in a rich, loamy soil. For first early, sow in hotbeds, in berry boxes or in small flower pots, six weeks before they can be set out in open ground. When danger of frost is over transplant in hills four feet apart each way. For general crop plant in open ground in May, about twelve seeds in a hill. When danger of bugs is past thin to four strong plants in a hill. For pickling, plant in June. Sprinkle vines with air-slacked lime, or use Sling Shot, to protect them from bugs.

Perfect White Spine This improved strain is pronounced by good judges superior to all others. Fruit even and good size, straight, well formed and symmetrical. It is of uniform shape, making it unexcelled for pickling. Immensely productive and keeps a long time. See illustration.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.



Perfect White Spine.



Enameled Perfect.

Early Express Extra Early The most remarkable and valuable new variety which originated with Mr. C. P. Coy. It is by all odds the earliest variety in existence. Quality is the very best, being free from any rank, strong flavor, and it is a fine variety for slicing as any later sort.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Enameled (Perfect) This new cucumber was bred up for extreme earliness and quality. It certainly has proven itself the earliest cucumber that we know of and one especially adapted to the hotbed or early garden. It sets its fruit quickly and produces beautiful cucumbers in the shortest possible time, and if kept picked will continue bearing for a long time.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50; postpaid.

Improved Chicago Pickle Illustrated in lower right hand corner. A variety which originated with a leading pickle grower near Chicago; is considered the best variety there; very prolific; matures early, produces immense numbers of fine shaped pickles.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Early Cluster Slim form. Extra prolific, frequently setting in clusters of two and three. Fine for small pickles. If fruit is kept gathered, the vines will continue in bearing.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Davis Perfect By using this variety gardeners can produce out-of-door varieties that will sell in the market for hot-house forcing varieties. The shape is ideal. It is almost seedless one-third of its length from the stem, and the few seeds are hardly noticeable.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 55c; lb., \$1.50; postpaid.

Improved Long Green Fruits average ten to twelve inches in length. Skin a deep rich green. Flesh solid, crisp and of excellent quality. This is an extra selected strain of the original type and can be depended upon to produce the true long dark green fruits, excellent alike for slicing or pickling.

PRICE: Large packet, 5c; oz., 20c; ¼ lb., 55c; lb., \$1.50; postpaid.

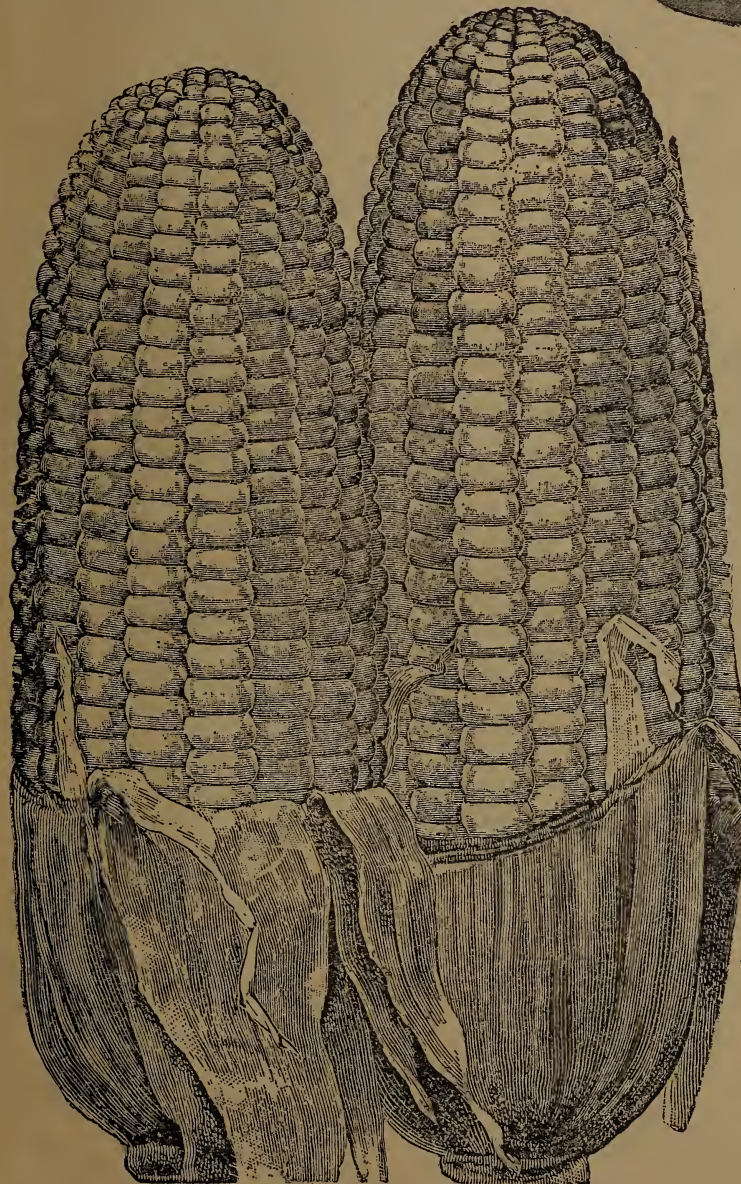


Sweet or Sugar Corn

Golden Bantam Is more firmly fixed in popular favor because of its extreme early character, vigorous growth and surpassing delicious flavor. The stalks are dwarf and sturdy in habit, growing to a height of four feet. They bear three to five good ears six to seven inches in length, have eight rows of broad, yellow grains, extending to the extreme tip. Market gardeners find **GOLDEN BANTAM** their most profitable variety throughout the season (from successive plantings). It is as distinct in flavor from that of white varieties as in color—being almost literally “sweet as honey.” The skin is so exceptionally tender that it does not need scoring or cutting across the grain. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.



Golden Bantam.



Peep o' Day—The Earliest Sweet Corn.

Peep o' Day Originating in the far north this variety is therefore extremely early in maturing. Besides this important feature it is a “Sweet Corn” in the true sense of the word, being remarkably sweet and tender. The stalks grow about four and one-half feet high, and are usually very prolific, producing from two to five ears each, which measure six to seven inches in length and are well filled. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Country Gentleman This variety is often called the “shoe peg” corn, owing to the arrangement of the crowded kernels which are long and very sweet. The ears average eight inches in length and are borne from two to five and sometimes six on each stalk. Of the finest quality. If you try this variety you will like it. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Early Minnesota A standard early variety that has held a high place in the list of sweet corns ever since its introduction. The ears are of good size, well flavored and of the best cooking qualities. Valuable for either private or market use. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Stowell's Evergreen This produces the largest ear of any sweet corn. A general favorite with canners. Ears are large size; exceptionally tender. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Crosby's Early For medium early use and general crop this is one of the most desirable varieties. Ears of medium size and the cooking qualities are excellent. A good cropper and profitable for family use and as a market sort. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Extra Early Cory (White Cob)—(No. 3). This was for years the most popular variety with market gardeners for first early until the introduction of Peep o' Day. Dwarf growth and yields well; ears medium fine. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Mammoth White Cory The largest and best extra early sweet corn. The stalks are no longer than those of the “White Cob Cory,” but each stalk furnishes two or more large, fine shaped ears. An early sort. The beauty and quality of this variety gave it ready sale, even when the market is overstocked. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.
Write for quantity prices.
We furnish many canners.

We Give Particular Care and Attention to the Production of Seed Sweet Corn
the Highest Quality

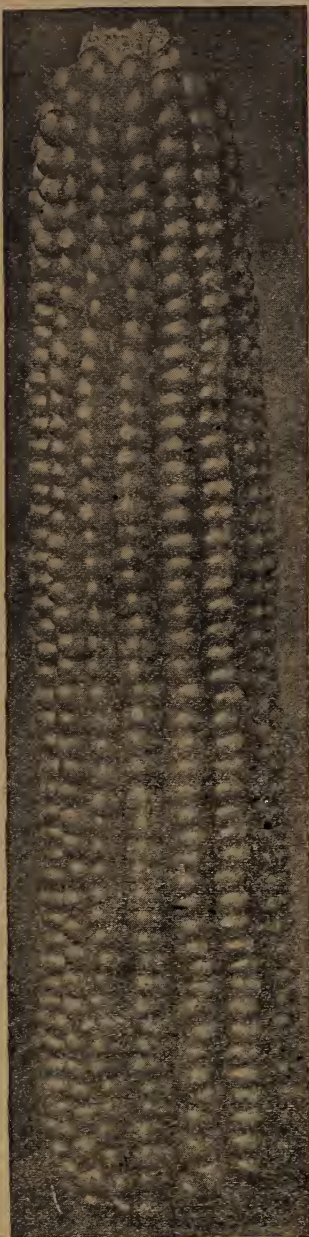
Plant Dependable “Jefferson Brand” Garden Seeds

Popcorn for Seed

It pays to raise Pop Corn as a general crop. Few farmers realize the enormous profit that can be made from a few acres of Pop Corn.

Pop Corn yields well, even in unfavorable seasons, and the demand usually exceeds the supply, which results in a ready market at all times. It is as easily grown as field corn, and generally produces from three to four times the value in money per acre, for the crop. Pop Corn may be planted quite late in the season, which is another advantage. Plant at the rate of five quarts per acre, in drills, three feet apart, dropping the seed one and one-half feet apart, in rows. Or plant in hills, using two to three quarts of seed per acre. Every farmer should have at least one or more acres in Pop Corn. Boys and girls can easily grow an acre, or more, and dispose of it to their neighbors or a local merchant. There is always a demand for it, at a good price, and you will be pleased and surprised at the extra money you can make from Pop Corn.

Write us for prices on large amounts.



Mapledale Prolific.



Australian Hulless.



Monarch White Rice.

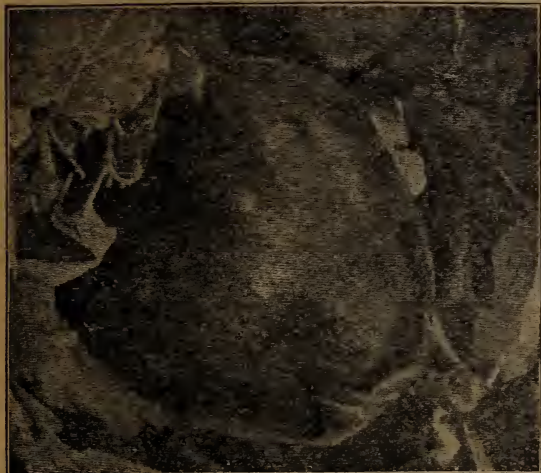
MONARCH WHITE RICE—This is our own strain of large Rice Pop Corn, and has been bred up to a wonderful productiveness. We consider it the best White variety grown. It bears three to six ears per stock, and yields 1,800 to 2,500 pounds per acre. The grain is large, and expands to a great size when popped. If you want to grow Pop Corn for market, we urge you to plant Monarch White Rice, as it will yield better and give you far greater returns than any other kind. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 35c; 3 lbs., 90c; postpaid.

AUSTRALIAN HULLESS—Also known as Japanese Rice, Baby Rice, and Tom Thumb. The Australian Hulless is a dwarf growing corn, a heavy yielder of attractive ears, peculiar in form, sometimes nearly as thick as long. The kernels are similar to the best strain of White Rice, but much smaller. Its chief merit lies in its popping quality, fine flavor, and absence of hull or shell. It is most tender and of delicious flavor when popped, almost melting in the mouth, due to absence of hull, shell or hard particles. It is grown extensively for market. Try at least a small amount. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

MAPLEDALE PROLIFIC—The most prolific Pop Corn grown. The stock is of a vigorous growth, reaching a height of six feet or more. The ears are large in size, often eight to ten inches long, well filled with bright, handsome grains, nearly white in color. It is an excellent popper, popping out pure white, and of fine quality, sweet and tender. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 35c; 3 lbs., 90c; postpaid.

QUEEN'S GOLDEN—The exceeding tenderness when popped, together with the delicious and delicate taste, make this variety one of the very best. It pops a creamy white, a single kernel often expanding to a diameter of nearly one inch. The stalks grow to a height of six feet, and the large ears are produced in abundance. It is preferred by many to the white seeded kinds. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.00; postpaid.

Improved Egg Plant



New York Spineless Egg Plant.

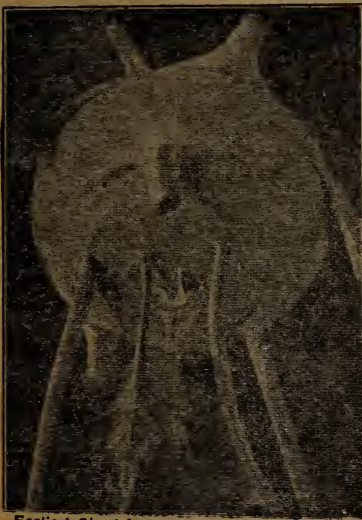
Our superior stock of this popular variety produces a large crop of shapely purple fruits of liberal size and perfect quality.

The plant is of low growth with a vigorous branching habit, strong enough to support its massive fruits, and compact enough to economize space.

It is very prolific, the fruits are of a pleasing purple color, and the quality superb. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

Black Beauty The earliest and best of all large fruited egg plants. The large fruits are thick, of most attractive form. The skin is a rich, luscious, purplish black. The fruits set freely and develop quickly so that the entire crop can be gathered before there is any danger of frost. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

Early Long Purple The earliest variety in existence. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$1.90; postpaid.



Earliest Short-Leaved White Vienna Kohl Rabi.

Ground Cherry This little fruit grows well on any dry soil, is easier raised than the tomato, are prolific bearers, and luscious fruit. For sauce or pies they are excellent; delicious as preserves and when dried in sugar are better than raisins for cakes and puddings. No one, after raising them once, will ever make a garden again without devoting a portion to the Ground Cherry. **PRICE:** Large packet, 10c; oz., 40c; ¼ lb., \$1.00; postpaid.

Kohl Rabi

One ounce to 3,000 Plants.

A popular vegetable intermediate between the Cabbage and the Turnip. Sow in drills from May to July. It is extremely tender and partakes of the flavor of both Turnip and Cabbage. Should be in every garden.

Early Purple Vienna

A bright purple. The leaf and stems are tinged with purple. **PRICE:** Large packet, 10c; oz., 30c; ¼ lb., 80c; lb., \$3.00; postpaid.

Early White Vienna

Flesh white and tender; good market sort. **PRICE:** Large packet, 10c; oz., 30c; ¼ lb., 75c; lb., \$2.50; postpaid.

Endive

(One ounce will sow about 60 sq. ft.)

Preferred to lettuce by those who have tried it and should be more largely used. One of the best and most wholesome salads for fall and winter use. Sow seeds in April for early use or in June or July for winter use. When leaves are 8 inches long tie together with a string near top to blanch.

Green Curled Has finely cut leaves and makes a handsome plant. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Giant Fringed Also called winter lettuce. This fine new variety is the best of all. It is a strong, vigorous grower, making a large, white heart, and the leaves are beautifully curled and of best quality. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Gourds Cultivate like cucumbers; may be trained over lattice work, fences, etc.

JAPANESE NEST EGG—Grows uniformly about the size, color and shape of a hen's egg. The shells are hard and make the very best of nest eggs, as they do not crack. The largest ones, when sawed in two, make excellent pots for starting tomatoes, strawberries and other plants. **PRICE:** Large packet, 10c; oz., 25c; ¼ lb., 90c; postpaid.

DIPPER—Makes a lighter and more convenient dipper than can be bought. Dippers of various sizes of a capacity from a pint to a quart and half can be had from a few vines. **PRICE:** Large packet, 10c; oz., 25c; ¼ lb., 90c; postpaid.

MIXED UTILITY—Seeds mixed. This is very popular with our customers. Many grow them as curiosities, but they are really useful in many ways. They are easily grown and will repay the work expended. **PRICE:** Large packet, 10c; oz., 25c; ¼ lb., 90c; postpaid.

ORIENTAL MIXED—A mixture of odd-shaped and fancy-colored sorts. Many handsome, useful and small gourds in this mixture. Also planted among ornamental climbing flowers. **PRICE:** Large packet, 10c; oz., 25c; ¼ lb., 90c; postpaid.

Leek

Leek is closely allied to the Onion. The entire lower portion of the plant is used, which is smooth and solid and is very generally used as a vegetable and in soup.

Sow early in spring and when 6 inches high transplant into rows 6 inches apart each way and as deep as possible, to perfect the bleaching process. The richer the soil the finer the Leek. One ounce to 100 feet of drill.

LARGE AMERICAN FLAG LEEK—A favorite variety. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 65c; postpaid.

MUSSELBURG OR SCOTCH CHAMPION—Grows to a large size. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 65c; postpaid.



Large American Flag.

Mustard Used as a condiment and the green leaves are used as a salad or boiled like spinach.

SOUTHERN GIANT—In great demand on account of its large, crimped, frilled, bushy and prolific leaves. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.

NEW CHINESE—A new variety with numerous tremendously large, broad leaves of good substance and of most appetizing pungency; they are of light green color and have large white ribs. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

Chufas Its flavor resembles the cocoanut. Very prolific. A nice little ground nut greatly liked by children, single one yielding 200 to 400 nuts growing out just under the ground. Grow best in light, sandy soil, well fertilized. Plant in April, 10 inches apart, in 2½-foot rows. Cover lightly. Soak seed before planting if very dry. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 35c; postpaid.

Garlic FRENCH, AIL—The Garlic is the most pungent in taste and has the strongest odor of all the onion family. It is largely used in the south of Europe, where it is esteemed for flavoring soups, stews, etc. The root or bulb is composed of many small bulbs, called "cloves," which are planted in the spring. We frequently receive orders for Garlic seed, but can supply the bulbs only. **PRICE:** ¼ lb., 25c; ½ lb., 40c; lb., 60c; postpaid.

READ THIS PAGE CAREFULLY. ITEMS OFFERED HERE ARE APPRECIATED ON TRIAL.

Plant Dependable "Jefferson Brand" Garden Seeds

Superior Lettuce Seed

(One ounce will sow
100 feet of drill.)

No vegetable is more universally used than lettuce, and to be thoroughly appreciated it must be brought to the table fresh and unwilted. Quality depends upon rapid and vigorous growth. Sow in

hotbed in March and in open ground as early as can be worked, thinly in drills about one foot apart. For succession, sow every three weeks during season. Thin out plants as they grow.

Grand Rapids Lettuce

This grand lettuce delights all who grow it. It is equally suited for the market gardener and the private planter. The market gardener will find that this lettuce will command a premium over other sorts on account of its appearance and quality, while for private gardens no other lettuce approaches it for table use. For salads it is unequaled. A forcing variety of superior quality and appearance, strong grower, free from rot, and keeps crisp and tender without wilting when exposed for sale longer than any other forcing lettuce. It is also a desirable variety for sowing in open ground. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

EARLY CURLED SIMPSON—An improved variety of Curled Simpson, with large, loose head and excellent flavor. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

CALIFORNIA CREAM BUTTER—A cabbage lettuce, with round, solid head, outside medium green, slightly marked with small brown spots; within, leaves are very rich cream yellow color, rich and buttery to the taste. Heads good size, compact, very hard and solid. In California, they eat the heart only, with a dressing of olive oil, vinegar, salt and pepper. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

ICEBERG—Has unusually solid head, is quick growing and always crisp and tender, whether propagated in early spring or in the hot days of summer. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.



Grand Rapids Lettuce.

May King A very early variety of head lettuce of compact growth. The inner leaves are a bright yellow, the outer ones a light green, sometimes slightly tinged with brown. Its greatest claim to popularity is in quick and rapid growth, making it extremely tender and brittle. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

RELISH, or Improved Big Boston—We are greatly pleased with this fine new variety. Is one of those rich, buttery-flavored sorts, which, when accustomed to, is preferred to the crisp-leaved varieties. It is the blanched yellow center of the head that is eaten. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

IMMENSITY—Enormous solid head variety, sometimes 18 inches in diameter, but still tender, crisp and of excellent quality. A reliable sort. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

DENVER MARKET—An early variety of head lettuce either for forcing or open ground. Large, solid heads, light green color and is very slow to go to seed. Leaves beautifully marked and blistered, very crisp and tender. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

Improved Hanson For general use for market and gardeners we are sure that no variety can surpass our "Improved Hanson" Head Lettuce. Deliciously sweet, crisp and tender, and absolutely free from any rank or bitter taste. Resists the summer heat extremely well. It cannot be too highly praised. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

SALAMANDER—An excellent spring, summer and fall variety, forming good sized heads. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

BLACK SEEDED SIMPSON—It is light colored, grows large in size; of fine quality. One of the best for forcing or outdoor planting. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

MIXED LETTUCE—A number of the best kinds in mixture. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

Early Prize Head One of the finest varieties ever introduced, forming a very large head, but not a solid one; the leaves are slightly tinged with brown, and is remarkable for its crispness and delicacy of flavor; is well adapted for either forcing or outdoor culture. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

Market Gardener This is one of the very best of the "Butter" head lettuces. It is a favorite with market gardeners on the city markets, and holds the lead in point of popularity. This is equally true in other markets. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

Muskmelons & Canteloupes

CULTURE.—Plant seed in hills 4 to 6 feet apart each way, after danger of frost is over. Use well-rotted manure in the hills. Insert seed just under surface of soil; 1 ounce to 60 hills; 3 pounds to acre. Thin out, leaving only 4 plants to a hill. A light, warm soil is best, but there are varieties adapted to heavy loams, if well drained. In hoeing draw the soil well up to the plants. Fight bugs with tobacco dust, Slug Shot, air-slacked lime, land plaster or Bug Death.

New Honey Dew Muskmelon

A Wonderful New Melon Sold at Fabulous Prices in All Leading Markets.

(Green flesh.) Honey Dew is a new type of muskmelon, and is the result of crossing the Rocky Ford with a South African melon. They grow uniform in size, about 6 inches in diameter from top to bottom and 7 or 8 inches long. The color is a dull white when ripe, having no netting. The rind, though thin, is very tough and so close that the excellent flesh is practically sealed up where it keeps in fine condition for several weeks after they are ripe. The flesh is a rich green color, very sweet and possesses a delightful flavor. The vines are more productive than the ordinary kinds and the muskmelons are superior shippers. The seed we are offering was grown from the originator's stock by one of the best melon growers in Rocky Ford, Colorado. We have only a limited supply of this wonderful melon so advise ordering early.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50; postpaid.

Jenny Lind This is the earliest of the green-fleshed sorts and one of the sweetest. It is round or flattened. In size it is small, being from three to five inches in diameter—a very convenient size for serving in halves. It is more largely grown in the great melon producing states than any other sort, and is used in enormous quantities in the cities and at resorts. The vines are very prolific and the culture profitable.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75; postpaid.



Burrell Gem—A Red Fleshed Rocky Ford.

The Burrell Gem Muskmelon A Red-Fleshed Rocky Ford. This new red-fleshed cantaloupe is ideal for either the home garden or for market. The rather elongated fruits average six inches in height, four and one-half inches and weighs about two pounds each. The flesh is red-orange, is very thick, fine grained and deliciously rich and spicy in flavor. **SEED CAVITY REMARKABLY SMALL;** the rind is thin but tough. Color green, closely interlaced with gray netting; ribs well arched. The vines are very prolific and the culture profitable.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.

Thoroughbred Rocky Ford Muskmelon

Sweet and Luscious—World-Famous for Its Captivating Flavor. **ROCKY FORD** has proven to be a most valuable muskmelon; its size, shape and quality exactly suit the epicure. It somewhat resembles the old Netted Gem, but is more oval in shape. The vines are exceedingly healthy and vigorous, bearing an enormous quantity of fruit during the entire season. It is safe to say that no melon has ever come into the market which has sold so early and at such high prices as the Rocky Ford, often to the exclusion of other varieties. The color of the skin is of a rich, greenish-gold; the netting is prominent and light in color; appearance very attractive. The flesh is very deep, ripening clear to the rind; very solid, yet thoroughly melting, and it has an exceedingly small seed cavity. **IT IS VERY SWEET AND LUSCIOUS IN FLAVOR.** Our seed was especially grown for us by a careful grower at Rocky Ford and is the best type of the genuine Rocky Ford Muskmelon. It has been used in many sections and pronounced by melon growers a very superior strain.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.



Rocky Ford.



Paul Rose or Petoskey.

Extra Early Hackensack We offer under this name a very distinct stock, and much superior to that often sold as Extra Early Hackensack. The fruit is medium sized, nearly round, with deep ribs and very coarse netting. The flesh is green, a little coarse, but very juicy and sweet.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.

Emerald Gem One of the most delicious little melons that we have ever eaten. The flesh is thick, of a suffused salmon color, almost red, and ripens thoroughly to the extreme thin rind. It is peculiarly crystalline in appearance, juicy and rich. The flavor is sweet and luscious beyond description, small but very fine for home use.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.

Paul Rose, or Petoskey Combines all the good qualities of the Netted Gem and Osage, the varieties from which it originated, possessing the sweetness of the latter, with the finely netted appearance of the Gem. Fruit oval, about five inches in diameter, shape and general appearance similar to the Netted Gem; of a light green or faint golden hue when fully ripe. Firm flesh, a rich orange like the Osage, but even sweeter and higher flavored; ripens close down to the rind, with small seed cavity; the most uniformly good of any muskmelon grown. Best shipper, just the size for hotels and table use. Really has no equal as a market melon for professional growers, and one of the very best sorts for the home garden. An exceptionally pure and fine stock.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.

Muskmelons

Continued

Grand Prize Winner

New Improved

Rocky Ford

"Gem of Eden"

Rustproof

This type is the highest development, both as to netting and rust-resistant qualities, yet attained in the Rocky Ford Cantaloupe. When vines of some varieties are entirely killed by rust and blight within two weeks after the shipping season, the vines of this variety are green and continue to blossom and set fruit until frost. The melons run very uniform in size and the exceptionally heavy netting is laced and interlaced over the entire surface, making it an ideal shipper. The flesh is green, shading to salmon about the seed cavity which is unusually small. The meat is solid and fine grained, flavor unexcelled. While a few days later than the Early Hackensack, it is more prolific. Desirable where there is an excessive rainfall.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50; postpaid.

Banana A long salmon-flesh variety having the fragrance of the banana, and of fine flavor, growing about 15 inches long, but desirable only as a distinct variety.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.



Gem of Eden.

Osage Melon

One of the best melons on the market for family use and also greatly liked by gardeners. The skin is thin, dark green color and slightly netted. The flesh is salmon color, remarkably sweet and spicy in flavor; extremely thick and delicious to the rind. The seed cavity is very small. It is seldom that one of poor quality is found. The whole crop is very even and extra heavy owing to the thickness of the meat. All lovers of fine melons should try the Osage.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.



Osage Melon.

New Grand "The Grand" is 10 to 14 days earlier than the Osage, under the same conditions. It is salmon-fleshed, and is of remarkably uniform size; the flavor very fine. It sets fruit near the roots, has a vigorous vine and resists disease better

than most sorts. Fruit average about 6 inches in diameter. Extra choice seeds, saved by the originator especially for us.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00; postpaid.

Formerly Jefferson-Ratekin Seed Co

Watermelons

THE WORLD'S BEST VARIETIES

Culture A light, sandy soil, with a good exposure to the sun, is the best situation to plant Watermelons. The ground should be prepared deep, but receive shallow cultivation. Hoe often and very thoroughly. Plant in hills 8 to 10 feet apart each way, with a very generous shovelful of well-rotted manure mixed with the soil in each hill. Plant 8 or 10 seeds in each hill, and finally, when

danger from insects is past, thin out to three strong plants. **Packets** are about right for small gardens. One ounce of seed will plant 20 to 30 hills; 4 pounds will plant an acre.

Special prices to large growers who mention varieties and quantities required.

OUR MELON SEEDS PLEASE EVERYBODY. THEY GROW BIG FINE MELONS EVERYWHERE

Our Special Stock of Melon Seed is saved from Hand Cut, Personally Selected, Thoroughbred Specimens, distinctly marked, uniform in size—Ideal Shape—Color and Flavor; fully developed, insuring the highest of perfection. **CHEAP SEED** is generally saved from **CULLS** of crop after the **BEST** specimens are marketed. If you want the **BEST SEED THAT CAN BE GROWN**, let us have your order. If

you want the cheapest seed that is offered, send to the fellow who is offering them the cheapest.

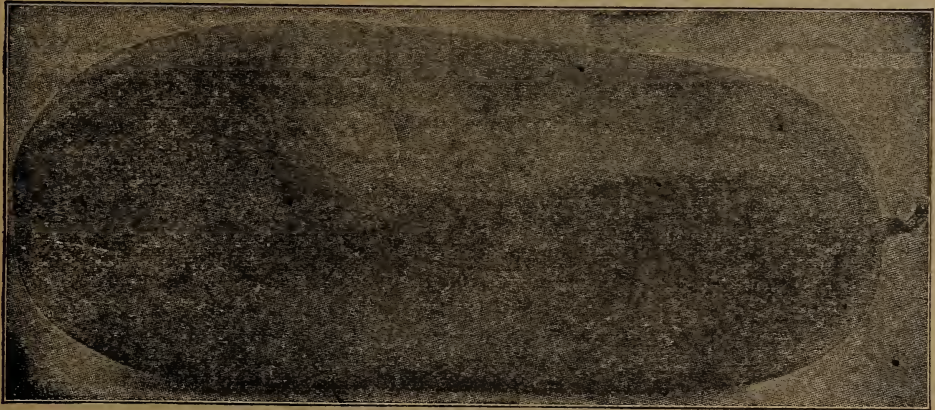
Our Seed, both Watermelon and Muskmelon (Cantaloupes) are saved from crops grown exclusively for seed purposes. No Seed is taken from Watermelons weighing less than 15 pounds, and seed from Cantaloupes that show perfection in every detail.

A WORD TO MELON GROWERS AND OUR MELON SEED TRADE

We are headquarters for all kinds of the best Melon Seeds and foremost varieties. Also all kinds of **Vine Seeds**. Strange as it may seem, our melon and vine seed trade is no pennywise part of our seed business. There is scarcely an order comes to us that does not include melon seeds. In fact, about everybody who plants seeds of any kind, plants melons; some only a few hills, others a half acre and others from one acre to 15 or 20, and a few as much as 25, 50 or 100 acres. Everybody likes melons—everybody eats melons. There is nothing more palatable, or relished more than melons, on the table, along the roadside, in camp or out in the field where one is at work, when they want to take a little rest. In view of the great demand for the best kinds and varieties we have for many years given our closest attention to the wants and requirements of this line of our trade—one of our leading specialties—going to great expense in visiting melon seed growers and localities where melon and vine seed growing is made a specialty—strictly in the interest of our trade and for the benefit of our customers. As a result of this care and expense we are pleased to say, we venture the belief that we have a trade along this line

unparalleled by any seed house in the West. Every pound of our melon and vine seeds are grown under special contract by private but experienced growers with whom we make special contracts, and while we have every confidence in the integrity of our growers, we take no man's word on quality and purity of our seed stock, as there is so much at stake, considering our large trade and the welfare of our customers. Therefore we have a representative on the ground at time of saving seed to carefully inspect the stock from which our seed is saved and no melon is allowed to be cut for our seed that does not come up to the contract; first class in standard and quality. Our representative remains with the grower until the seeds are washed, dried, sacked and put aboard the cars for shipment. Thus it must be patent to anyone, that when we pay a premium price and extra expense to obtain select stock for the benefit and protection of our customers, we cannot compete in prices with those who buy commercial seed, saved from culls, big, little and all kinds of melons that simply contain seeds. But if you want the best, highest grade and best varieties, true to name, we want your order, big or little.

Plant the "Tom Watson" Watermelon---Grand old Favorite



"TOM WATSON" WATERMELON.

Tom Watson No melon ever introduced has sprung into popular favor so quickly as the Tom Watson; it is the watermelon of today, and for the future, as it possesses all of the fine qualities of a perfect variety, both as to its productiveness, quality and for transportation to distant markets without damage. It is probably the best shipping melon and one of the best main crop sorts. It grows to a very large size, ranging from 18 to 24 inches long by 10 or 12 inches in diameter, frequently weighing as much as 40 to 50 pounds and even more. The fruit is large and long in shape, colored a medium green with a light tracing of a darker shade. The flesh is deep red in color, and of good quality, extending close to the rind, free from core, crisp and melting. Tom Watson always commands the highest market prices, and is strongly recommended everywhere. We have a very fine selection of this melon, much superior to that generally offered.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

Cole's Early One of the very earliest and best of the early sorts. It is very hardy, medium in size, nearly round; rind dark green striped a lighter shade. The flesh is deep pink, and excellent in quality; seeds black. It is a great favorite in the northern states, and one of the finest for family use or the home market. Very early and very productive.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

The Dixie This variety originated in the south and is a splendid melon for shipping or table use. It is of large size, medium early, oblong in shape, with dark green rind beautifully striped with lighter shades. The flesh is bright red and of excellent quality. It is very prolific, frequently maturing from 6 to 8 large melons to the vine. Seeds black.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

Plant Dependable "Jefferson Brand" Melon Seeds

Watermelons The World's Best Varieties

New National Melon

The main reason we gave this fine melon the name "NEW NATIONAL" was because of its proven ability to flourish anywhere and everywhere any melon can be grown. The National is of medium to large size and of very high quality. Our seed of this melon originally came from some fine specimens shipped into this city from the South, and being of such superior quality, we saved the seed and planted them on our farms near this city, and from them obtained our start, and have now been distributing the seed of this melon for the past five years, and everywhere it has proven a great success. In shape it is oblong. The outside color is dark green with light colored striped markings. The flesh is brilliant red in color and remarkably solid. The flavor is delicious, and entirely stringless. The rind, though thin, is tough, insuring good shipping qualities. The National produces large melons often weighing 40 pounds and over. Its uniform and handsome appearance, with luscious flavor, makes it a rapid seller, and for the home garden it has no equal. We wish to urge you to be sure to order and obtain seed of this fine melon.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

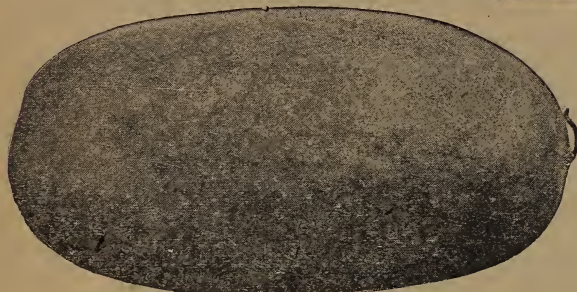


New National Watermelon.

Kleckley Sweet or Monte Cristo

Special strain of this grand market gardener's melon. Large, oblong, 26 inches in length by 10 to 12 inches in diameter, dark green, flesh bright scarlet, rind only about ½ inch thick. Extremely sweet and sugary and of such tenderness that it leaves no strings or pulp whatever. It is a melon for home use, but ships very well. Undoubtedly one of the best melons of today. We paid \$1.50 per pound for the first seed received from the originator and have made a specialty of improving this variety. We are absolutely certain there is none better. This variety is most reliable and you can depend on having fine melons when you plant our seed.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.



Sweetheart Melon.

Sweetheart Melon This melon is early, large, handsome, heavy and productive. Shape is oval; color, very light green. Flesh, bright red; solid, tender and very sweet.
PRICE: Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50; postpaid.

Black Diamond It is vigorous, and earlier than any standard variety. Is immensely prolific; one melon grower loaded five cars from five acres of it and then had large quantities of salable melons left. The melons in these cars averaged 34 pounds each. Melons are of very uniform shape and as good in shipping as Kolb's Gem. Of a deep, glossy green color when ripe, which gives them the appearance of having been varnished.
PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

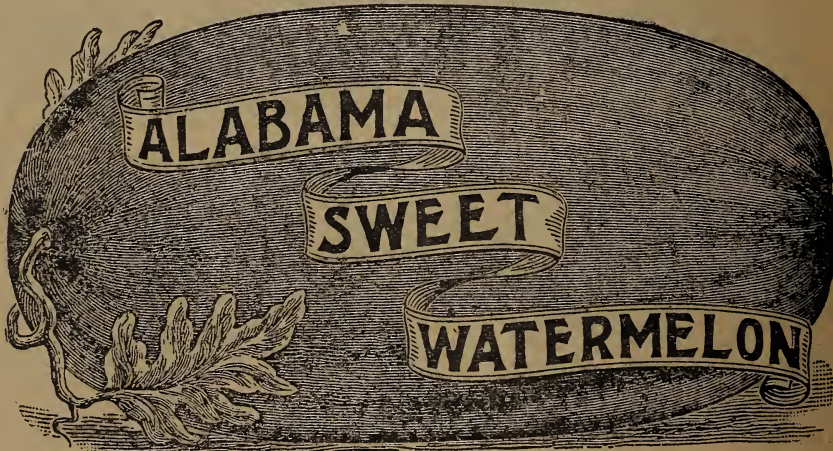
Alabama Sweet Alabama Sweet is a medium green melon, irregularly striped with dark green. It is of large size, though not ungainly; form oblong; flesh bright scarlet, very tender and sweet, and of excellent quality. Seed white. It has a very tough rind and is a splendid shipper.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

Georgia Rattlesnake

This variety grows very large and oblong in form; color light green, beautifully mottled and striped with a darker shade. The flesh is deep red; rind thin but very tough and solid. Seed white.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

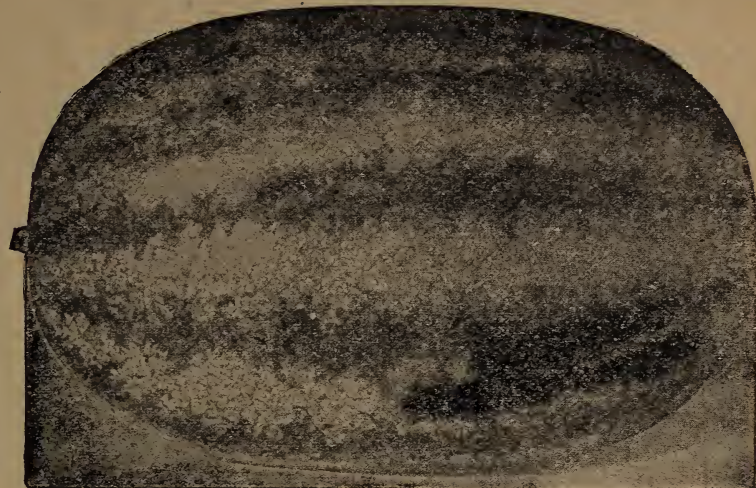


Formerly Jefferson-Ratekin Seed Co.

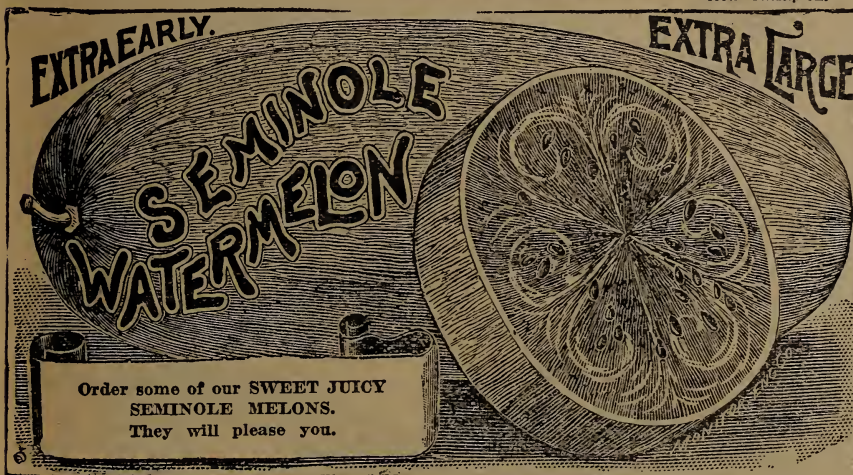
OUR WATERMELON SEEDS ARE
ALL TAKEN FROM FIRST-CLASS
SELECTED MELONS ONLY.

New Champion A cross between Sweetheart. All that could be said of **KOLB'S GEM** as to good shipping qualities can be truthfully stated in a higher degree of **NEW CHAMPION**. All the praise of high quality bestowed on the Sweetheart can be repeated of our new melon, but its prominent point of merit is its extreme size. **NO MELON EVER YET PRODUCED ANYTHING LIKE SO UNIFORMLY LARGE FRUIT, OR APPROACHES IT IN PRODUCTIVENESS.** Melons weighing from 40 to 60 pounds are frequent. It is the most prolific watermelon grown. Its color is a rich dark green with light colored markings. Of uniform, symmetrical shape, roundish to bluntly oval, and this similarity of shape running through the whole field.

PRICE: Large packet, 10c; oz., 20c; ¼ lb., 50c; lb., \$1.75; postpaid.



New Champion.



Seminole Watermelon

Here is a melon that may be styled an old-timer, as it has stood the test of time, always and everywhere proved to be among the best, earliest, surest and most productive. It is one of the sweetest, juiciest melons there is grown and among the earliest to produce ripe fruit. A beautiful red core makes it very attractive and its fine quality makes it most delicious to the craving appetite during the long hot summer days, when nothing is so appetizing as a nice melon just plucked from the vine. The illustration shows its exterior and beautiful shape better than we can describe it—one of the first to bear and longest to continue bearing its fruit.

PRICE: Large packet, 5c; oz., 5c; ¼ lb., 35c; lb., \$1.25; postpaid.

Kolb's Gem This variety, on account of its excellent shipping qualities, is extensively grown for that purpose. Grow nearly round, and the color is dark green, with lighter, narrow stripes; very thick and tough rind. Flesh light red and of good flavor. Our seed is choice.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

The Oklahoma Gem (One of the very best.) Mammoth Ironclad of immense size, running from 35 to 40 pounds each. They were uniform in size, oblong shape, handsomely marked, flesh scarlet red and very solid, juicy and the sweetest melon ever eaten. The rind thin, remarkably hard and tough,

which makes it a long keeper and splendid shipping melon, one of the best of which we have any knowledge. They are sure the finest melons.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

Peerless or Ice Cream This variety grows to a medium size, is very early, and one of the best for growing in the North. It is a short oblong in form, nearly oval; of pale green color, mottled and finely veined with a darker shade. The flesh is light crimson, remarkably sweet and luscious. Seeds white.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.40; postpaid.

Florida Favorite This variety, as the name implies, is simply the old variety of melon among the Florida growers. It is very early, and grows to a fair size. It is of oblong shape; rind light green with irregular stripes of darker green. The flesh is bright red, very crisp and sweet, of excellent quality. Seeds white.

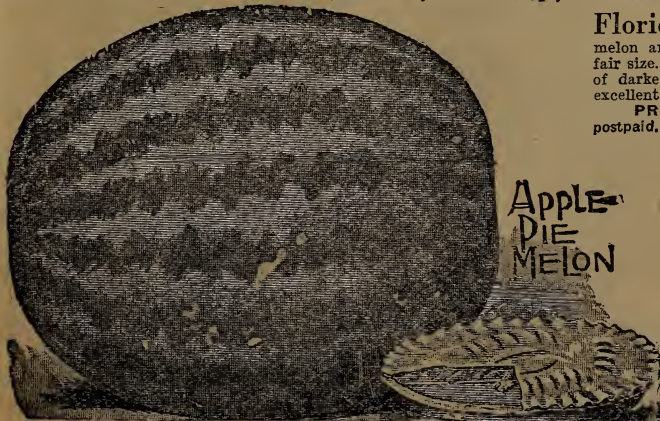
PRICE: Large packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; postpaid.

Apple Pie Melon This much heralded novelty is simply the old variety of green seeded citron melon, but will appeal to many customers. The fruit and vine grow similar to the Watermelon, but the flesh is not edible in its raw state, but is used exclusively for sauces, pies and preserving. The flesh is white and solid, having a most delicious flavor. Each vine produces five to fifteen melons, which will keep fresh and solid all winter, and can be used when wanted. The delicious flesh resembles the flavor of apples, and for this reason is called Apple Pie Melon.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 60c; postpaid.

Red Seeded Citron Is round, dark-green, striped and mottled with light green.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35; postpaid.



Plant Dependable "Jefferson Brand" Melon Seeds

JEFFERSON BRAND ONION SEED

We make the growing of Onion seed one of the specialties of our House. The stock from which we grow our seed, is old pedigree stock, famous throughout the country for its purity and fine quality. MARKET GARDENERS and ONION GROWERS who use large quantities of Onion Seed, please write for WHOLESALE PRICES

HOW TO GROW ONIONS

Culture.—The Onion ranks with the Cabbage in popularity with all cultivators, whether it be for the humble garden of the poor, or the more pretentious one of the wealthy; to grow them successfully, it must be borne in mind that the soil cannot be too rich, and however good it may be, it requires more or less manure for every crop; it is a plant producing numerous roots, which spread to a great extent, absorbing nourishment from every part of the soil. In regard to rotation of crops, the Onion is an anomalous case, for the same ground has been known to produce heavy crops yearly for over half a century. The system pursued is to manure the ground heavily with rich, well-rotted manure, trenched or plowed early in the Spring, and leveled with a rake or harrow. In cool climates, seed sown early in the Spring produces full-grown Onions the same year; but in this vicinity and South it requires two seasons (unless you sow the Bermuda or Italian varieties); the first season produces the small sets, which ripen in July; these are carefully stored in dry situations until the following Spring, when they are planted out and form the full-grown Onion about Mid-summer. The Yellow Globe Danvers, Prize-Taker and the Southport Globes are the best

varieties for cultivating in large quantities, as they are more hardy and keep better; they are called the Annual Onion because they perfect themselves in the northern, western and eastern states the first year from seed. Sow the seed in rows early in Spring, 9 inches apart if to cultivate with the hoe, or 2 feet if the harrow or cultivator is to be used; cover the seed, very lightly, and should the weather be favorable the rows will show themselves in about two weeks. Keep the rows clear of all weeds by hoeing, observe not to hoe deep, for the more the Onion rises out of the ground the finer it is and the better it keeps. As soon as the plants are 3 inches high, thin them out to 2 inches apart; if the weather is moist the thinnings can be safely transplanted, which will also attain a full size; but observe, in planting them, to place the roots only into the ground. For growing large Onions from seed, sow five pounds of seed to the acre. Be particular in the selection of your Onion seed; you must secure the new crop, as that of two years old will disappoint you, as failures are continually occurring from sowing old or spurious seed. Nothing further will be required until the crop is taken up, except in destroying all weeds as they appear.

HOW TO GROW ONION SETS

Onion sets are produced by sowing the seed very thickly in shallow drills, quite early in Spring; the young plants form Onions about the size of peas about midsummer, when the foliage becomes brown and dry, the crop should then be harvested. Select good, rich soil, and be careful it is not weedy ground, as the labor in cultivating it would be much increased. The best varieties to sow for this purpose are the Yellow Strasburg, White Silver Skin and Extra Early Dark

Red. For Onion sets it requires sixty pounds of seed to the acre.

To Keep Onion Sets.—As soon as the crop is ready for harvesting they should be lifted in dry weather, and thoroughly dried in the shade, after which spread them out thinly in a cool, dry, airy loft; the Yellows should not be over 3 inches and, the White not over 2 inches thick, and frequently turned over.

GROWING LARGE ONIONS FROM SETS

In planting Onion sets draw out drills about an inch deep and nine inches apart, leaving a space 15 inches between every three or four drills for convenience in hoeing and collecting weeds. Plant the small sets in these drills about 2 inches apart, but do not cover them. We say plant small sets because if you plant large ones they will shoot to seed. In a few days

they will commence growing; keep the ground clear of all weeds by frequently hoeing until the crop will be ready for lifting in July. In midsummer the grower can generally realize higher prices for his crop than later, as the Onions raised from seed do not come into market until Fall, and the demand for early shipping is generally great.

The World's Greatest Red Onion.
Yields 1000 Bushels per Acre, Leading All Other Varieties



For general purposes, the country over, no variety is more largely grown. The largest, most uniform, heaviest yielder and the best keeping of all the red onions. This is a standard red variety. Large size; skin deep purplish red; form round, somewhat flattened; flesh purplish-white. We recommend it as a general cropper and a variety that will do well anywhere that onions can be grown. One of the best keepers. Yields enormous crops. Our stock of Large Red Wethersfield Onion Seed is personally selected by us and excelled by none. **PRICE:** Large packet, 10c; oz., 30c; ½ lb., \$1.00; lb., \$3.50; postpaid.

Always Commands First Attention in the Markets

Formerly Jefferson-Ratekin Seed Co.

Reliable Onion Seeds one of Our Leading Specialties

The Best Seed a Necessity There is no crop which depends more upon the quality of the seed than the Onion crop. **GOOD ONION SEED** is of vital importance if you expect satisfactory results. The seed we offer is not surpassed anywhere; have been thoroughly tested for vitality, so that success is certain, where soil and season are favorable, and is equally sure to produce a crop and an abundance of Onions. **OUR**

ONION SEED CANNOT BE EXCELLED in purity, vitality or high quality.

Culture Onions do best on a rich loam. Stiff clay and light sand are equally unfavorable. Drill 4 to 5 pounds of seed per acre, $\frac{1}{2}$ inch deep. Onions are produced the first year from spring sown seed. Culture should be frequent, though shallow. Winter storage demands dryness and protection from sudden changes. Onions should never be handled while frozen.

Choice Onion Seed

For table use large onions are much preferable to small ones and bring a better price on the market. While they do not keep quite as well as some other kinds, still they are usually of fine flavor and good till January or February.

Southport Red Globe Our strain of this onion is of the very best. Globe Onions are the most popular varieties grown, and the Red Globe is planted heavier than any other variety. In the East this onion is called the Southport Red Globe and in other sections it is sold under different names, such as Ohio Red Globe, Minnesota Globe and Globe Red Wethersfield. We have bred up a variety superior to any of the above named sorts. It is a perfect globe, skin being of a rich, glossy red, flesh fine grained, and always mild and pleasant. Like our other Globe varieties it is a very hardy and a splendid keeper, and always commands top prices on the market. You make no mistake in planting this variety.

PRICE: Large packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00; postpaid.

Southport Yellow Globe This is one of the same general character as the two varieties described above, except that the skin is of a rich yellow color; flesh pure white and of a mild and delicious flavor. These three varieties of globe onions we have bred up for years, so we are sure that any of our friends who entrust their orders with us will be highly pleased with the results they obtain from their crop. All of our Globe Onions ripen evenly, are wonderful keepers and on this account should be planted more extensively.

PRICE: Large packet, 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75; postpaid.

Yellow Mammoth Prizetaker One of the largest, handsomest, finest flavored, and in every way a choice variety of yellow onion, having been grown to enormous weight of over 6 pounds. Of a clear, bright straw color, and uniform, perfect globe shape. Produces enormous crops, one report being over 1,200 bushels per acre; bring an extra price, being sold on the market as fancy onions. Keep wonderfully well. Our seed is unexcelled, ripen up hard and firm, and present the handsomest possible appearance in market, while the pure white flesh is fine grained, mild and delicate in flavor. To grow largest size, sow early in hotbeds and transplant to open ground soon as weather is favorable.

PRICE: Large packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00; postpaid.

Mammoth Prize Taker.



Yellow Globe Danvers A handsome round or globe shape, of large size, with thin, yellow skin, white flesh, fine grained, mild, firm, and the best of keepers. Ripens early, sells readily at highest prices in markets. This is one of the best cropping varieties; has yielded 1,000 bushels per acre.

PRICE: Large packet, 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50; postpaid.

Mammoth Silver King Of attractive form, flattened, but thick through bulbs, often attains weights of from 2 $\frac{3}{4}$ to 4 pounds. Skin and flesh white, mild and pleasant flavor; matures early, of uniformly large size and always bring a good price in market.

PRICE: Large packet, 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.40; lb., \$5.00; postpaid.

Mammoth Silver King.

Plant Dependable "Jefferson Brand" Onion Seed

Reliable Onion Seed

Early Iowa Red

The earliest of red skinned sorts. It matures very early, and will succeed in cold mucky ground where other sorts fail. It will produce fine marketable onions in 90 days from the sowing of seed, and matures fully ten days earlier than the Red Wetherfield. It is of mild flavor, and keeps well. It is of medium size, deep red in color, the grain is fine and close, and the onion is solid and heavy. It is hardy, reliable, and well adapted for early market. Early Iowa Red will succeed almost anywhere, but is particularly fitted for northern latitudes. We especially recommend Early Iowa Red to our customers in the North and Northwest, where the seasons are short and cool.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.25; lb., \$4.00; postpaid.



Early White Barletta

This variety is two weeks earlier than the famous White Queen; it is regarded as the earliest variety in cultivation. When crop is matured the tops die down close to the bulb, leaving the most perfect miniature onions imaginable, ranging from 1 to 1½ inches in diameter; of a pure paper-white color, exceedingly mild and delicious in flavor; it is a grand variety for pickling purposes and if sown thickly in rows will produce small, round onions of the size of marbles.

PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.85; lb., \$6.00; postpaid.



Southport White Globe

On account of its handsome appearance this onion always brings top prices on all markets. It is a silvery white in color, globe shape in form, flesh of delicious flavor and a fine keeper. This onion is a very heavy yielder, but a very shy seeder, and therefore the seed is always high priced.

PRICE: Large packet, 10c; oz., 40c; ¼ lb., \$1.40; lb., \$5.00; postpaid.

White Silver Skin

This is the famous variety which is sown so exclusively for growing Onion Sets, from which full grown onions are produced by June and July. It is not only the mildest, but the most delicate flavored variety, and generally preferred for table use; of a silvery white color, and exceedingly attractive. It is also used when quite small for pickling purposes.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.25; lb., \$4.00; postpaid.

Yellow Strasburg or Dutch

Color brownish yellow, bulb quite flat and of good size. This is a variety grown for sets, thousands of bushels of which are grown annually, and shipped to all parts of the United States. Seed sown in the spring form the small sets by July.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.25; lb., \$4.00; postpaid.

Australian Brown

This variety, owing to its extraordinary keeping qualities, has gained great popularity, especially with Onion growers in the southern states. It is of roundish form; of a beautiful amber brown color; of mild flavor; almost as solid as a rock, and may be classed with the early varieties.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.25; lb., \$4.00; postpaid.

Choice Onion Sets, Northern Grown

Early green onions are obtaining out sets than by sowing seed. Some of the latter, however, should be sown to follow the crop grown from the onion sets. Plant both sets and seed as soon as the ground is warm and dry in the spring. PRICE: Our prices are based on the present market rates and are subject to market changes. It is impossible for us to make fixed prices. Lowest market prices on large or small quantities will be given on application at any time. We handle Onion Sets in large quantities. A pound of sets is equal to a quart by measure. Order Onion Sets early.

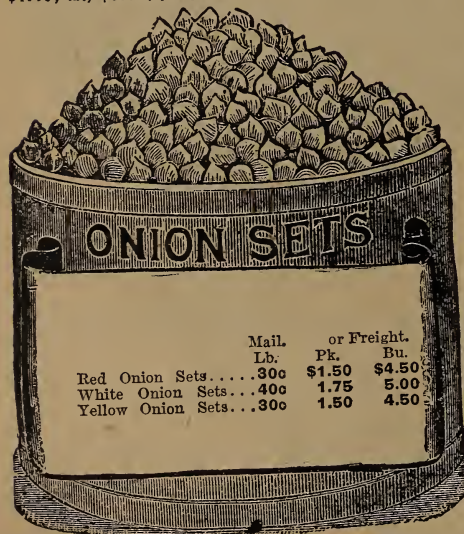
Standard Onion Sets (Bottom Sets)

Are grown from seed sown low furrows, and covered about half an inch deep. These are the little Onion Sets so much planted for first Onions. One bushel weighs 32 pounds.

White Multipliers

Pure, silvery-white, enormously productive, frequently 20 bulbs in a cluster from a single bulb. Of excellent quality and size for bunching green, or can be ripened for pickling onions. Remarkably good keeper; very early.

PRICE: Lb., 40c; postpaid. Express, peck, \$1.75; bu., \$6.00.



Formerly Jefferson-Ratekin Seed Co.

PARSNIP

CULTURE.—Work the soil very deep and pulverize the surface thoroughly.

Sow the seed in early Spring, $\frac{3}{4}$ of an inch deep, in rows 12 to 18 inches apart.

As soon as the young plants appear, cultivate and hand weed them, and when 3 inches high thin to 6 inches apart in the row.

Cultivate sufficiently to keep the soil loose throughout the season. Freezing improves the quality of Parsnips for table use, so it is customary to take up in the Fall when the ground begins to freeze what will be needed for winter use, leaving the remainder to winter over in the ground, or better still, pitting them as is often done with other roots so that access may be had to them at any time.

One ounce of seed for 200 feet of row; 5 pounds seed required for an acre.



Improved Sugar or Hollow Crown.

Sugar, or Hollow Crown

This is the variety most generally grown for either table use or stock feeding; it is of uniform growth, has smooth, clean skin, and is easily distinguished by the leaves arising from a cavity on the top or crown of the root.

PRICE: Large packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.60; postpaid.



Improved Table Guernsey

A greatly improved and wonderfully fine strain of the Hollow Crown Parsnip. The roots do not grow as long as the Hollow Crown, but are of greater diameter and more easily gathered. Very heavy cropper; roots are smooth with a deep, hollow crown and a small top. Flesh fine grained; sweet and of excellent quality; cooks evenly, center being as fine, soft, even quality as outside portions.

PRICE: Large packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75; postpaid.

It Pays to Plant Okra

A fashionable vegetable, of easy growth. The pods are used when young and tender for soups and stews. Pick pods quite young and tender and slice crosswise before cooking.

CULTURE.—Sow in May and June, in drill three feet apart, cover the seed with about 1 inch of soil, and thin to 12 to 18 inches apart in the rows. Use 1 ounce of seed to 100 feet of row; 8 pounds to an acre.

White Velvet Okra

A standard variety for home use and local markets. We have a specially fine early strain of this variety. This strain we find to be the best of all the white varieties.

PRICE: Large packet 5c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 75c; postpaid.

Kleckley's Favorite

The pods average 6 inches in length by $1\frac{1}{4}$ inches in diameter at the bottom, carrying the thickness well throughout the length. Plant grows $2\frac{1}{2}$ to 3 feet in height, smooth pods appear at leaf joints.

PRICE: Large packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c; postpaid.

Perkin's Perfected Long Pod

Large okra, esteemed by gardeners. It is a great improvement on the old green podded sorts. Large, handsome. Fine quality, very productive; 4 to 5 feet tall.

PRICE: Large packet 5c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 75c; postpaid.

PARSLEY

CULTURE.—Parsley is valuable for flavoring and garnishing purposes. Sow in drills as early in the Spring as the soil can be pulverized. Seed two years old will vegetate more freely than new seed, which will frequently require five or six weeks to germinate; so the cultivator must not be disheartened if the plants do not appear within a month. The seed will also germinate more freely by soaking it twenty-four hours in water, and mixed with sand before sowing.

Sow seed in shallow drills in the early Spring for border or in rows 12 to 18 inches apart; and thin the plants to 4 inches. Cultivation should be frequent and weeds kept removed.

One ounce of seed will sow 150 feet of row; 6 pounds of seed required for an acre.



Moss Curled Parsley.

Extra Moss Curled

Our fine strain of Extra Moss Curled is the most ornamental of all varieties. It is handsome enough to have a place in your flower garden. It is the favorite sort for garnishing and to supply hotels and markets. It is planted almost exclusively by market gardeners for that purpose.

PRICE: Large packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75; postpaid.

Double Curled

Plants of dwarf, compact growth, and the young leaves have the edges heavily crimped, giving it a general appearance of coarse moss. Used by market gardeners.

PRICE: Large packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00; postpaid.

Plain Leaved

Is very hardy, a strong grower, and excellent for seasoning, for which purpose it is grown almost exclusively.

PRICE: Large packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50; postpaid.

Sugar or Sweet Pumpkin

The pumpkin from which the celebrated pumpkin pie is made; also first class for baking. It is small, being from 10 to 12 inches in diameter, but its quality is of the finest. Most prolific and is not excelled as a table variety.

PRICE: Large packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75; postpaid.



PUMPKINS

We are special growers of Pumpkins, each year planting many different varieties. We list only those sorts which have given satisfaction. Look over the varieties we offer. There are some to suit each and every need of our customers. Pumpkins are less sensitive than Melons or Cucumbers, to unfavorable conditions of soil or climate, but are cultivated the same, though on a larger scale. They are raised between hills of corn, or in fields by themselves, but more properly belong to the farm than the garden, as they readily mix with and injure the quality of the finer squash. After danger of frost is over, plant the seed in hills 8 to 10 feet apart each way, dropping about a dozen seeds in a hill. The soil should be made as rich as possible. If planted with corn, 2 or 3 seeds a rod apart each way will be sufficient. When danger from bugs is past, thin to three plants to a hill. Hoe often until vines begin to run. Cut the ripe Pumpkins from vines after the leaves die, leaving three to four inches of stem attached, and store in a dry place. Handle carefully to avoid bruising. Use one ounce of seed to twenty hills of most varieties, four or five pounds per acre.



Connecticut Field An immensely productive, large, orange color, field Pumpkin, generally used for planting in corn for stock feeding, but is also a splendid variety for making pies. The fruit is rather oblong in form, flattened at the ends, smooth, hard; of reddish orange color distinctly ribbed skin, with rich orange yellow flesh. Often measure from 15 to 30 inches in diameter.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25; postpaid.

King of the Mammoths Wonderfully grand and colossal variety, astonishing everyone by its mammoth size and heavy weight. Think of a single Pumpkin weighing 469 pounds! Many of our customers saw this specimen on exhibition at the World's Fair. King of the Mammoths is always a prize winner at fairs and exhibitions. Notwithstanding its enormous size, it is one of the best pie and table varieties grown. A splendid keeper, and exceptionally valuable for feeding purposes.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00; postpaid.



Yankee Pie The noted New England Pie or Small Sugar Pumpkin. Same shape and color as the Connecticut Field but is smaller, very sweet, fine grained and one of the best varieties for table use. It pleases everyone for making pies. Early.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

A PRIZE WINNING PUMPKIN

Mammoth Prizetaker Do you want to grow the biggest pumpkin in your county? If so, **MAMMOTH PRIZE TAKER** is the variety to do it with. It is nothing to grow them weighing 150 to 200 pounds on unfertilized ground, and has a record to have grown one to the enormous weight of 339 pounds under fertilization. Under good cultivation it's a monster. In quality it is good, considering the size. Flesh is a bright golden yellow and fine grained. A good yielder and keeps well.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00; postpaid.

Mammoth Tour Also called "Mammoth" where it is largely grown, both for feeding cattle and table use. Grown to an immense size, sometimes 3 feet in length, and to a weight of 100 to 200 pounds. Flesh of salmon color. Seed of a peculiar shape.

PRICE: Large packet, 10c; oz., 25c; ¼ lb., 75c; lb., \$2.25; postpaid.

Big Tom A strain of Yankee or Connecticut Field Pumpkin which has been selected for many years to secure the most uniform type. Not only are the pumpkins larger and smoother but the yield is nearly double that of the old variety. We recommend it to our customers as the very best type of cornfield pumpkin.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Japanese Pie A crook neck variety. Early. Flesh of fine quality. Keeps well.

PRICE: Large packet, 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Quaker Pie A small medium-sized variety, rather pear-shaped, color creamy inside and out. Of good quality, and one of the best for pie making.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Large Cheese or Kentucky Field This is a very popular pumpkin for pies and is quite commonly known as "Sweet Pumpkin." In size they average about as large as the Connecticut Field, but are flat shaped, with creamy buff skin and thick golden flesh. It is one of the best of the pie pumpkins and can be grown in the corn like the common cow pumpkin.

PRICE: Large packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.00; postpaid.

PEPPER

Sow early in spring in a hotbed in shallow-drills 6 inches apart. In order to make strong, healthy plants, they should be transplanted, when a few inches high, into another bed, like the Tomato, or sow in a box placed near a window in a warm room, and transplant early in summer, or sow in a warm spot of the garden about the middle of spring and transplant them, when 2 inches high, in rows 18 inches apart and a foot from plant to plant. The Pepper delights in a rich soil, and should be well cultivated. (One ounce will produce about 1,800 plants.)

Chinese Giant Most gigantic of all Giant Peppers. A fine, mild red pepper of enormous size, magnificent appearance and brilliant, glossy scarlet color. The flesh is mild and unusually thick. Makes an excellent salad sliced and served like tomatoes. **PRICE:** Large packet, 10c; oz., 75c; ¼ lb., \$2.50; postpaid.

Kaleidoscope A very ornamental new sort. The small fruit changes from cream color to canary, deepening to orange, then turns into pink, until it becomes a deep, shining scarlet. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

Sweet Mountain, or Mammoth This pepper is in shape similar to Large Bell, but fruits are much larger and not nearly as pungent. A splendid sort for making stuffed pickle. Has been standard large pepper for many years. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.90; postpaid.

Red Chili Small, long fruit, but very hot. Used for pepper sauce. **PRICE:** Large packet, 10c; Large packet, 10c; oz., 50c; ¼ lb., \$1.90; postpaid. oz., 60c; ¼ lb., \$2.25; postpaid.

Red Cayenne Pods long and slim, of medium size. Pungent. Used for pepper sauce. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

Coral Gem Bouquet This new red hot pepper is the finest of the smallest sized varieties. Excellent for pepper sauce. Nice to chop up for mixing piccalilli. **PRICE:** Large packet, 10c; oz., 80c; ¼ lb., \$2.25; postpaid.



Ruby King Very large in size, 4½ to 6 inches long by 3½ to 4 inches thick. When ripe they are of beautiful bright ruby red color and are always remarkably mild and pleasant to the taste. Produces large, handsome fruit and is splendid for stuffed peppers or mangoes. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.00; postpaid.

Pimento This variety of recent introduction is an absolutely sweet pepper and not only desirable for salads and stuffed peppers, but is also used largely by canners. The flesh is very thick and solid, mild and of superior flavor. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

Early Large Neapolitan A popular market variety on account of its earliness and productiveness; it forms fruit 4 to 5 inches long by 4½ to 5 inches in circumference, and as mild as an apple. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$2.00; postpaid.

World Beater The fruit of this very desirable variety is of the same shape as the Ruby King, except that it is broader at the pointed end and grows to a larger size. The flesh is unusually thick, sweet and of a mild flavor. The color is a deep green when young, bright scarlet when ripe. One of the best large sweet varieties for mangoes or stuffed peppers. A good sort for market gardeners and shippers. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.



Large Bell or Bull Nose Pepper.

Large Bell, or Bull Nose Early standard sort. More pungent than Ruby King and not quite so large. Is the favorite for drying for winter use. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.00; postpaid.

Mixed Peppers A choice mixture of all the above and several other fancy varieties. Fine for exhibition. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.



Until recently it was thought that peanuts could be raised only in the South, but they are now raised as far north as Canada. In the last few years Peanuts have become very popular for dry land farming. They are classed with Dwarf Milo and Feterita in their ability to withstand dry weather, and made good returns in the dry summer of 1913.

The tops of the plant make good hay. The yield even in dry seasons is from one-half to three-quarters of a ton of hay and from 25 to 60 bushels of nuts per acre. The whole peanut plant makes nice feed for rapidly fattening cattle and hogs, especially when combined with grain. A common method of harvesting is to let the hogs gather the nuts.

Peanuts do best in light sandy loam. They should be planted in rows from 28 to 30 inches apart and from 9 to 16 inches apart in the row. They need not be shelled, but should be soaked in warm water for a day or so and then planted at once in warm soil. Planting should be cultivated and kept clean until they begin to form pods. After that they should be left alone. It takes from one peck to a peck and a half shelled nuts and from a bushel to a bushel and a half in the shell to plant an acre.

Mammoth Early Virginia This very desirable variety is as early as the earliest, hardy, very prolific and of the best quality. Boys, here is a chance for you. Think of peanuts in your own garden and have plenty of them to eat. They produce 25 to 60 bushels per acre and are as easily cultivated as corn. **PRICE:** Large packet, 10c; ½ lb., 30c; lb., 50c; 2 lbs., 80c; postpaid.

Spanish Peanut A Splendid Early Variety. Pods small, but remarkably solid and well filled with nuts of very fine quality. The yield per acre is very large. Can be cultivated with the plow. Because of their early habit and easy cultivation it is the best variety to grow for fattening hogs. **PRICE:** Large packet, 10c; ½ lb., 30c; lb., 50c; 2 lbs., 80c; postpaid.

Choice Garden Peas

BEST VARIETIES

Two Pounds Will Plant 100 Feet of Row—One and One-half to Two Bushels for an Acre.

CULTURE: Peas of extra early, smooth class are the very first thing to be planted in the spring. The wrinkled sorts follow a little later, as they are not quite so hardy. Tall late varieties need brush or other support. By selecting sorts that do not grow much over four feet high the necessity of providing brush may be avoided. Judicious selection of varieties for succession will give a full supply of choice green peas during the entire season. Open furrows three or four inches deep and three feet apart; scatter the peas into them and cover with hoe. Cultivate like corn or beans. Garden peas, however, require good, strong and fertile land.

Extra Early Smooth Varieties

Wrinkled Peas weigh 56 lbs. to the bushel; Smooth Varieties, 60 lbs.

New Wonder A round seeded hard shell pea that can be sown when frost is barely out of the ground; before it is safe to sow wrinkled sorts. This, with its quickness of growth and maturity, renders it the earliest pod on record. Is unequalled for general excellence, grows 2½ feet high and pods of good size; of splendid flavor. Is a very heavy yielder and with its extreme earliness, lies its great value to gardeners. It is one of the best. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

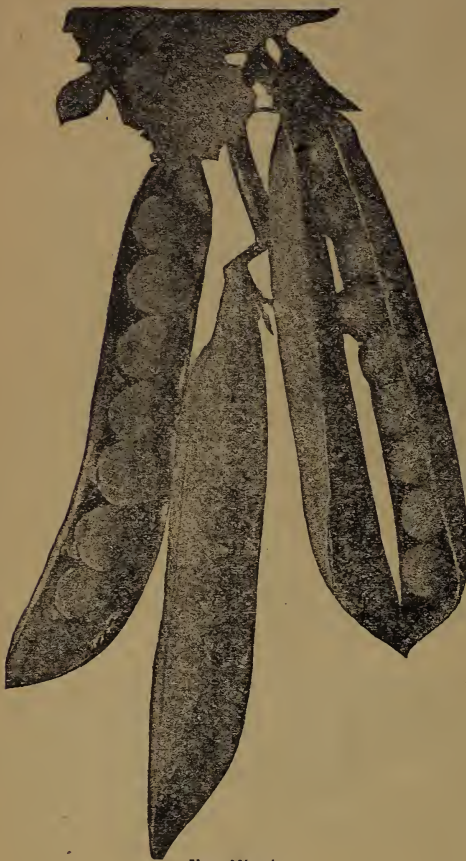
Iowa Challenge Extra early variety of superior merit which is a favorite with market gardeners. We can in confidence say that after a trial of nearly all extra early varieties we have not found one possessing more merit, hence its name. For the market gardener it has no superior. Is not only extra early and prolific, but of good flavor. All good qualities of Extra Early are most nearly brought to perfection in the Challenge. Height 18 inches. **PRICES:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

First and Best **EXTRA EARLY**—One of the earliest fall varieties, with smooth, round peas which ripen almost at one time. Grows two to two and one-half feet high, seed yellowish white; pods straight, short and well filled. Quality best of smooth seeded early varieties. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Earliest of All A smooth pea well suited for extra early planting; vine 2 feet high; pods small; will not rot in cold, wet ground; popular with canners. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Early Dwarf Wrinkled Varieties

Alaska Height two feet, pods rather small, dark green color, well filled, the earliest pea known, being earlier than the Rural New Yorker, and 70 per cent of the pods can be gathered at the first picking. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.



New Wonder.

Little Marvel A strong vine about 15 inches high, bearing tremendous crops of fair size pods, frequently borne in pairs. Pods 2½ to 3 inches long, containing six to seven large, deep green peas. As early as American Wonder, more productive, and will be preferred by gardeners generally because of extra quality. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

Premium Gem This has been for many years the standard dwarf wrinkled peas for the family, and are also popular with market gardeners. It only grows 12 to 15 inches high and requires no support. It is an improvement on the McLean's Little Gem, being much more prolific than that variety. Pods large, dark green, and quality of the peas is superior to most sorts. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

Gradus or Prosperity **WITHOUT A RIVAL FOR TABLE QUALITY.** An Extra Early Wrinkled Pea, hardy, early and very prolific. This remarkable pea has been on the market 10 years, and has grown in favor until it is the most widely known variety in cultivation. The secret is that it produces a **TELEPHONE POD** as early as Alaska. Then, too, its quality is of the highest order—fully equal to the finest late marrow grown. The vine is of vigorous growth, about 30 inches in height. The pods are large and fine and most luscious quality. For the home garden it is perfectly adapted. It is the most profitable on account of the earliness combined with size of pod. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

Nott's Excelsior The sweetest and most prolific of all the early Dwarf Peas; outyields Premium Gem or American Wonder. The best sort for the market or home garden. The vines are vigorous and very prolific, while the pods are closely packed with large peas of very fine flavor. Height, 1 foot. **PRICE:** Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

McLean's Little Gem A dwarf, prolific, green wrinkled marrow; habit similar to the Tom Thumb. It has all the sugary flavor of the late wrinkled peas. Height, 1 foot. **PRICE:** Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.



Gradus, or Prosperity.

WRITE FOR QUANTITY PRICES ON PEAS.

Formerly Jefferson-Ratekin Seed Co.

Choice Garden Peas

CONTINUED

American Wonder

much cold, wet weather, but is robust habit, growing about 12 pods of the finest flavored peas. PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

Popular extra early variety for family garden. Cannot be planted quite as early as smooth sorts; will not stand as far superior to them in flavor and table qualities. Dwarf, inches high; produces a profusion of good-sized, well-filled pods of the finest flavored peas. PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

Second Early and Main Crop Varieties

Dwarf White Marrow

An improvement on the old Large White Marrowfat. Fully as productive, but does not grow so tall and rank. Used almost exclusively for late midsummer planting by market gardeners and is very productive. Grows 3 to 4 feet and is best if supported, though support is not usually given. PRICE: Large packet, 5c; ¼ lb., 10c; lb., 40c; 3 lbs., 90c; postpaid.

Champion of England

It grows 4 to 5 feet high and requires support, but fine quality and large crop production more than repays any extra labor required. A strong, vigorous grower and continues to bear for a long time. PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

Telephone

Immensely productive; finest quality; an excellent sugary flavor; vines very strong growing, about 4 feet high, and should be supported. Pods large, with 6 or 7 large, delicious peas. PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

Everbearing

Fine for main crop. Grows about 2 feet high, strong and vigorous, branches in a peculiar manner and needs no support. Continues to grow and bear all season if picked. Pods and peas of large size and fine quality. PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.50; postpaid.

Improved Strategem

The most popular late variety for market or family use. It is preferred because of the immense size of pods and peas and the exceptional sweetness and tenderness of the peas when ready to use. Does not grow very tall, being really a half dwarf sort two to three feet high, and does not require support, though it will repay for the labor of training up with greater yield and longer bearing season. It is a vigorous grower of branching habit, and under favorable conditions an enormous cropper. Pods are large, long, and filled with seven to nine large peas of superior quality. PRICE: Large packet, 5c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.60; postpaid.

Rhubarb, or Pie Plant

IDEAL MAMMOTH—This new variety, which is decidedly the finest and best of all, originated with Dr. Kennicott, of Illinois. The stalks are much larger than the Victoria or any other sort and are also produced in much greater abundance.

Like all highly improved sorts it seeds sparingly and it comes more nearly true to name if grown from seed than most other varieties. PRICE: Large packet, 5c; oz., 20c; ¼ lb., 60c; postpaid.

VICTORIA—For many years the standard variety of rhubarb. Stalks are not so large as Ideal Mammoth, but are preferred by many on account of their more piquant and richer flavor. PRICE: Large packet, 5c; oz., 20c; ¼ lb., 60c; postpaid.



Victoria Rhubarb.



Improved Strategem.

Rhubarb Roots

Everyone realizes the value of rhubarb or pie plant in the home garden. The best way to get a start is to purchase a few roots, as you can save one year's time in this way. The roots we offer are not seedlings, but large divided plants. Plant in spring or fall, setting plants 3 feet apart each way.

VICTORIA—The standard for general use. PRICE: Each, 15c; 5 for 75c; doz., \$1.50; postpaid.

IDEAL MAMMOTH—The largest and best variety. See description in vegetable seed department. Each, 25c; 5 for \$1.00; doz., \$2.00; postpaid.

Spinach, Long Standing

CULTURE: For early spring use, sow seed in August or September, in rich soil. Upon approach of cold weather, cover the plants with 3 inches of straw or salt hay. In the spring, when dry, remove the litter and plants will be ready for use in short time. This is a wholesome vegetable throughout the entire season. It is very hardy. Seed sown in September will produce small plants, which, with a slight covering, will be available for use very early in spring. The plant is small, with very rich lustrous green leaves. These are short, broad, very thick, and of so great substance that it loses bulk in cooking less than any other sorts. PRICE: Large packet, 5c; oz., 15c; ¼ lb., 50c; postpaid.



Long Standing Spinach.



WRITE FOR
QUANTITY
PRICES ON
PEAS.

Dwarf Champion

This is a great improvement on the Champion of England which has been one of the sweetest, best and most popular varieties for the last thirty years. The old variety is very tall (6 feet), while this new sort grows only 2½ feet and still vines are vigorous with a great profusion of very large pods filled with large sized peas of superior quality and very sweet. Medium late and suited to main crop. PRICE: Large packet, 5c; ¼ lb., 15c; lb., 50c; 3 lbs., \$1.35; postpaid.

Radishes--All the Best Varieties

One ounce will sow 100 feet of drill;
8 pounds an acre.



White Icicle Radish First and best of all. If you want to grow the **VERY EARLIEST** and **BEST** of **ALL**, this is what you want to do it with. It certainly **IS A GEM** and is valuable for growing in a hotbed or to sow early in the open ground. It will supply your table with nice white crisp radishes ten days to two weeks before any of your neighbors have a taste. It is twice as long as your finger, as white as snow and as crisp and brittle as an icicle and will produce fine radishes fit to pull in twenty days from the time you plant

A Prize Col-lection only 25c

Little Red Wonder If you want to grow the earliest **Scarlet Turnip Radish**, this is what you want. It certainly is a gem and is especially adapted for growing in hotbeds or to sow early in the open ground. It is crisp and tender, and will produce radishes fit to pull 20 days after sowing the seed. We are pleased to offer our customers such a splendid early radish and know it will be highly prized. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50; postpaid.

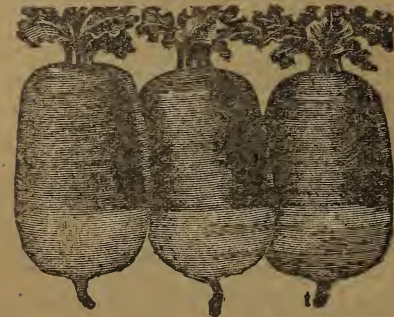
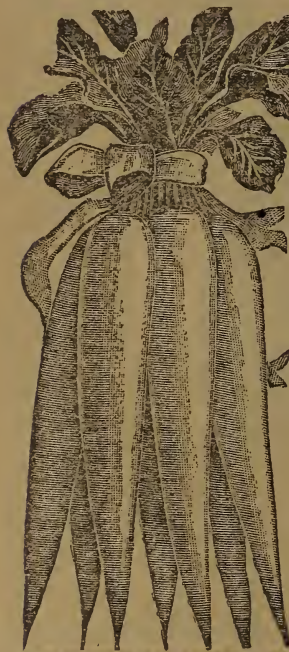
French Breakfast Is distinct from any radish in cultivation. This pretty radish in color is bright red tipped with white. It is oblong in shape, and in quality is crisp and tender. It is a quick grower, and is an exceedingly popular variety. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

the seed. We are pleased beyond expression to have obtained the entire stock of seeds of this new introduction, for our trade and customers. The supply, however, is limited this year, but a small quantity of seed will grow a good supply for your table and a world of seed for another year. By all means include some of this seed in your garden seed order. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

1 packet Rockford "GEM OF EDEN" Cantaloupe.....	10c
1 packet "NEW NATIONAL" Watermelon.....	10c
1 packet "20-DAY WHITE RADISH".....	10c
1 packet "MAGI QUEEN" Tomato.....	10c

All for 25c, postpaid

40c



French Breakfast Radish



Improved Chartier.



Earliest

Scarlet Radish

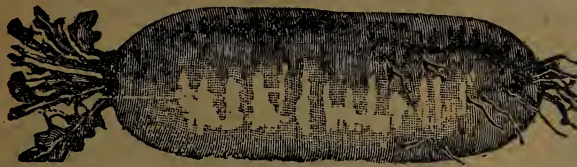
Improved Chartier An American variety which is one of the best long radishes for general planting outdoors. Roots in good condition when one-half inch thick and continue hard and crisp. Red above and shading to clear white at the tip, as shown in the illustration. Large, but both brittle and tender. Widely popular. This radish makes a fine appearance on the market stall. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

Mixed Radish Our mixture of about 2 dozen kinds contains all shades and shapes; red, white, pink, variegated; round, half-long, and long, in great variety. It is all the go for small gardeners, where space is limited and you want to make garden and be done with it. One sowing does for the whole season, as they come early, medium and late. You always have some that are just right—sweet, juicy, delicious, crisp. You will be surprised and delighted with our popular radish mixture. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

YOU CANNOT BUY BETTER RADISH SEED THAN OURS.

Radishes--Continued

Striped Triumph A beautiful new variety. It is of the shape shown in our illustration with white skin striped white scarlet, being decidedly ornamental when placed on the table. It is very early and has a very small top, thus adapting it to cultivation in hotbeds. The flesh is white, crisp, tender and as good flavor as any radish grown. They are always fine. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.



California Mammoth White Winter Radish.

The merits of Winter Radishes are little appreciated, because few people have knowledge of their worth. These grow to large size and keep well for winter use. Sow seed in the middle of June.

California Mammoth White Winter Radish Pure white. about one foot long and two or three inches through; flesh tender and crisp, keeping well through the winter. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

China Rose Bright rose color, flesh firm and piquant. One of the best for winter use. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.



Striped Triumph Radish.

Horseradish Roots or Sets Horseradish is always in demand in winter and spring. The culture is by sets or roots cutting, as it seldom seeds. These sets are planted in rows or furrows 2 to 3 feet apart and 15 to 18 inches apart in the rows. The sets should be placed in per-

pendicular position, with crown 3 to 6 inches below surface. Horseradish delights in a deep, rich soil. It makes large top growth, giving weeds small chance. The **COMMON VARIETY**—very choice—we offer at: Crown, 10c each; doz., \$1.00; postpaid.

Squashes

The Acknowledged Favorite Standard Varieties

One ounce early varieties will plant about 40 hills; 1 ounce late

varieties will plant about 20 hills; 3 to 4 lbs. per acre. Plant about the middle of spring in hills; the early sorts four to six feet apart, the late variety eight to twelve. Thin to three plants in the hill. The soil cannot be too rich. Use Slug Shot to kill the bugs.

Early White Bush Summer Squash

Scalloped — This is the white **Patty Pan**. The plants are of true bush growth, producing fruit ready for use very early in the summer. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50; postpaid.

New GOLDEN HUBBARD SQUASH

PRODUCTIVE .
EARLY
BEAUTIFUL
GOOD

Fordhook

"Bush growth." Plants can be grown closely together. Fordhook is a week later than the **Early White Bush**; is much sweeter and better flavored. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Golden Bush An improvement on the old **Yellow Bush Scalloped** or **Patty Pan**. The earliest of all and quite a favorite with all who like summer squash. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Early Bush Crookneck Splendid, early, productive, fine quality. With all new varieties recently brought out, many claim there is no summer squash superior to this. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Golden Hubbard Also called **Red Hubbard**. The One Variety of Squash that is justly popular wherever grown. This is a counterpart of the old **Green Hubbard**, except in color, which is a bright, deep orange yellow; much richer in color than Hubbard, fine grained, cooks very dry, and is of excellent flavor. Its keeping qualities are fully equal to, while in productiveness it far excels the green variety. This is a squash that every market gardener should plant, for it is a "seller." **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

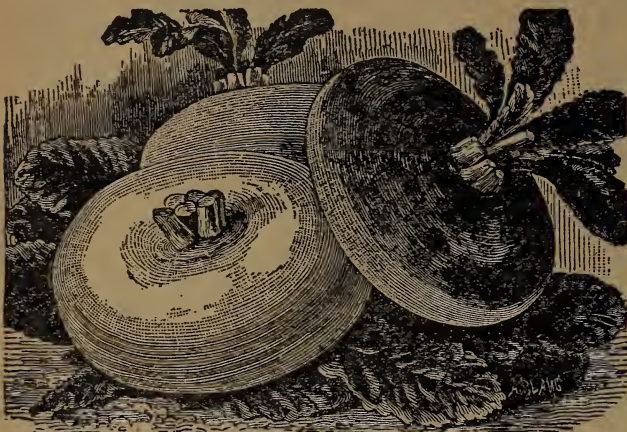
Blue Hubbard, or Marblehead Splendid winter variety, flesh similar to the Hubbard in quality. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Warty Hubbard A new strain of the Hubbard; the wartiness indicates a very hard shell, which is one of the very best features of a long-keeping squash. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

True Hubbard This sort has stood the test of all rivals and is the most popular winter squash grown; hard, green shell, flesh bright orange yellow, fine grained, very dry, sweet and rich flavor; keeps in perfect condition throughout the winter. Our stock is grown on our farms and is selected for thick flesh and solidity. It has been given our special care for a period of years and is of the highest type. **PRICE:** Large packet, 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00; postpaid.

Formerly Jefferson-Ratekin Seed Co.

TURNIPS



Early White Flat Dutch—Early Red or Purple Top

Red, or Purple Top (Strap-Leaved) A variety of the easiest culture, and a general favorite with all; will do well sown either broadcast or in drills, and will form good-sized bulbs in a favorable season in about seven or eight weeks from sowing; it is of a perfectly flat form with a small tap root and a bright purple top; the leaves are short and narrow, growing erect from the bulb; it is a fine table variety and excellent for feeding stock. This and the White Flat Dutch are the most popular of all the flat varieties. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60; postpaid.

Early White Flat Dutch (Strap Leaved) This is one of the earliest varieties and can be sown either broadcast or in drills; it is without exception the best and most popular early sort for either table use or for market; is of a beautiful flat form, of pure white color and of a delicate, mild flavor. It produces bulbs entirely free from small roots and with long, narrow strap leaves growing erect, which permits close culture. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60; postpaid.

Early White Flat Dutch—Early Red or Purple Top.

Extra Early Purple Top Milan This celebrated foreign variety is the earliest strap-leaved turnip in cultivation; flesh pure white, purple top, of flat form and excellent quality. Highly recommended for an early crop. **PRICE:** Large packet, 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50; postpaid.

Extra Early White Milan This is the earliest of all varieties; of a perfect flat form; pure white; small foliage and of fine quality; as an early market variety it is unsurpassed. **PRICE:** Large packet, 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50; postpaid.

Early Snowball A small white globe, very handsome, extra early, tender and sweet; highly recommended. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60; postpaid. them, when fed in combination with hay.

Rutabaga or Swede Turnip

An eminent authority on agriculture never made a more truthful statement than when he said: "As compared with hay at \$10 to \$15 per ton, I prefer Rutabagas at \$5 per ton." An average yield of 20 to 30 tons to the acre is common.

If sown the last of July or the first of August, they make an excellent pasture during the fall months, and the turnip will furnish a rich food all winter. All kinds of stock relish and fatten upon them, when fed in combination with hay.

CULTURE: The ground should be enriched with well-rotted manure and the seed sown in drills two feet apart and thinned out to six or eight inches in rows. When the roots have fully matured and before severe weather sets in, pull, cut off the tops and store them in a root cellar or pit.

Improved American Rutabaga A Prize Winner Everywhere. Our special strain of Improved American is the best and heaviest cropper of all rutabagas. It is of fine form, with a rich purple top and yellow flesh, is tender and sweet and free from stringy, hard flesh. It has a small top, fine roots and is the surest and heaviest cropper. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60; postpaid.

Mammoth White Russian One of the best in cultivation. One of the greatest sorts. Grows very large with small top, short neck. Produces heavy per acre. Keeps sound till late spring. The best Rutabaga in cultivation. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 55c; lb., \$1.75; postpaid.

New Monarch or Elephant This magnificent Rutabaga is unquestionably the most profitable of all Swede Turnips, as well as the hardest, heaviest, best and most productive, a yield of 1,000 bushels per acre and over being of frequent occurrence. Yellow color, always sweet, tender, juicy and nutritious. **PRICE:** Large packet, 5c; oz., 15c; ¼ lb., 55c; lb., \$1.75; postpaid.



Purple Top Milan Turnip.



Improved American Rutabaga.

TOMATOES

FAMOUS MAGI QUEEN TOMATO
EARLIEST OF ALL

HAS EVERY OTHER TOMATO BACKED OFF THE TRACK

The Earliest and Best Tomato Grown

Combines the earliness of Earliana with the beauty and flavor of Stone and the solidity of Ponderosa.

We first introduced this **GRANDEST OF ALL TOMATO** in 1912, under the head of "NAMELESS TOMATO," in which we said the first early tomato introduced by us that will displace all other varieties for earliness, size, color, shape and solidity; equal alike for either home or market use and canning purposes. This being our (the introducer's) first season, we want every one of our customers to try out at least one packet. This has since and is now verified by more than fifty thousand gardeners, truck growers and housewives who have tried and tested it. Tested in all sections of the country from New Jersey to Oregon, from Minnesota to Texas; in fact, every section of the country where tomatoes are grown, and have proven that it is **THE VERY BEST TOMATO GROWN**. The fruits ripen up evenly and set more freely than Earliana, also they command a higher price on the market on account of their color, size and shape. In the Northwest they are sure to set their fruit, are abundant bearers and have proven themselves practically free from the terrible blight which affects other varieties in that section.

In the south the "Magi Queen" has proven a winner. It ripens for first early market, keeps well, is a good shipper, but best of all, withstands the hot, dry winds, is free from the rot and blight which southern gardeners are always fighting.

SIZED UP FROM EVERY STANDPOINT, IT IS THE BEST ALL PURPOSE TOMATO I HAVE EVER SEEN. The **MAGI QUEEN TOMATO**: Grand and glorious tomato; the largest, handsomest, finest flavored, most superior early tomato ever offered. It's a healthy, thrifty, rapid growing tomato. The plants are compact, with stout, close joined branches, which set fruit very freely. The fruits are good size and very beautiful; brilliant scarlet color, smooth, sweet and juicy, yet the flesh is solid, almost "beefy," contains but few seeds and with very small core. It is everbearing from two months after it is transplanted until frost, and has proven the best and sweetest of all for slicing and for all purposes. **PRICES:** Large packet, 10c; oz., 60c; ¼ lb., \$1.75; lb., \$6.00; postpaid.

Earliana

Probably no early tomato has so large a sale as Earliana. Extremely early, remarkable for large size, handsome shape and beautiful bright red color. Its solidity and fine qualities fully equal the best late sorts. One of the most profitable crops for the market gardener and especially desirable in the home garden. As far as I am personally concerned I am satisfied **MAGI QUEEN** is still the earliest of all tomatoes. But at the same time I am willing to admit that Earliana is also an excellent variety, and that it has given **MAGI QUEEN** a harder tussle for supremacy than any early variety. **PRICE:** Large packet, 10c; oz., 40c; ¼ lb., \$1.50; postpaid.



Magi Queen Tomato.

Red Ponderosa

From its first appearance 14 years ago it gripped and held the admiration of all who grew it. This has made it possible not only to maintain the high standard of quality which it has always occupied, but by careful development to raise it to a higher standard of perfection than ever.

Unquestionably the one great requisite in a vegetable for private use is quality—first and always **QUALITY**. With a Tomato this means primarily good flavor, free from acidity; then a fairly tender skin, solid, meaty flesh, few seeds and very little juicy pulp. These ideals are perfectly exemplified in Ponderosa; Ponderosa in size or delicious, meaty flavor is not only the largest, but also the heaviest tomato grown. The color is a glowing crimson; shape quite regular, considering its size, and it is considered by thousands of people the best table variety in existence for slicing, having but few seeds. The fruit ripens early and bears well until very late. A good tomato for home use. We offer the genuine headquarters stock. **PRICE:** Large packet, 10c; oz., 60c; ¼ lb., \$2.25; postpaid.

The New Stone, Genuine Strain

This is one of the most popular main crop varieties in cultivation and there is probably more seed sold of this sort than all others combined, under **Ideal Tomato Conditions**. We have brought this tomato to a very high state of perfection, so that our seed is not surpassed in quality by any offered. This variety has obtained immense popularity with market gardeners, growers, canners and home growers everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red. Its shape perfectly smooth, and thicker from stem to blossom end than most varieties, making it very handsome and salable. Nobody finds any fault with this variety, but all speak in the highest terms of its beautiful color, its wonderful yielding qualities, its unequalled firmness, or some other of its good points. **PRICE:** Large packet, 10c; oz., 40c; ¼ lb., \$1.50; postpaid.



Ponderosa.

Plant Dependable "Jefferson Brand" Garden Seeds



New Parde.

Mammoth Beauty One of the best ever introduced. Its size, beauty, shape, color, flavor, durability and productiveness make it desirable to growers.
PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.75; postpaid.

Golden Queen The superior flavor of the yellow varieties is bringing them into favor as table fruit, and those who think of the old yellow sorts will be surprised at this smooth, beautiful fruit, as smooth as the best of red varieties, and of a fine and distinct flavor.
PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.50; postpaid.



Dwarf Champion Tomato.

Dwarf Champion Dwarf and compact in habit; solid by some seedsmen as the Tree Tomato. Stands up well, even when loaded with fruit, having a stiff, bushy stem; can be planted close together; very desirable in small gardens; early. It is always smooth and attractive; the skin is tough and flesh solid, but has no hard core and is of good flavor.
PRICE: Large packet, 5c; oz., 40c; ¼ lb., \$1.25; postpaid.

Mixed Tomatoes For the advantage of some of our customers who would like to try all kinds, we have prepared this mixture of the varieties named and several others which we think will please all.
PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.50; postpaid.

"New Parde"

The Grandest Tomato on Earth

"New Parde" So named by John S. Hunter, of Savannah, Mo., because of its wonderful adaptability to all sections. Mr. Hunter claims this to be a partnership tomato, as it combines all the good qualities of the best tomatoes he has raised in the past. Following is the description given: "New Parde" seems to be a much earlier tomato than the Earliana. The fruit is pinkish red in color, fine flavor, very meaty and few seeds. The vines grow into a compact bush, and were very heavily loaded with fruit, extra large in size for an early tomato. 'New Parde' stood the drouth exceedingly well, and bore plenty of fine fruit until killed by the frost, at which time the vines were still loaded with green tomatoes. It is sure a fine flavored tomato, and I expect to grow a lot more of them another season."

We have a large quantity of extra fine seed of the "New Parde" Tomato, and will be glad to distribute it among our customers this season. **PRICE:** Large packet, 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00; postpaid.

Perfection Solid flesh, always smooth, and of blood-red color. This is a general favorite, equally desirable for the home garden, for shipping and for canning.
PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.50; postpaid.

Matchless Well worthy of its name, for in beauty of color and symmetry of form it is without a peer. The vines are of strong, vigorous growth, well set with fruit; are free from core, of the finest flavor, of a very rich red color, of largest size. Fruit solid, a fine quality and keeps well.
PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.50; postpaid.

Ground Cherry, or Husk Tomato

Makes Fine Preserves. This useful fruit, which is also called Strawberry and Ground Cherry Tomato, is greatly valued for use as a preserve; it also makes delicious pies either when ripe or dried with sugar. When ripe the fruits are half an inch in diameter and of very sweet and agreeable flavor. The vines cover the ground and yield enormously of the fruit, which is enclosed in a husk or fruit calyx. There are two varieties of the Husk Tomato, the Golden Husk and the Purple Husk. We consider the Golden Husk by far the better of the two and unless otherwise directed will always send Golden Husk on orders received for Strawberry, Ground Cherry or Husk Tomato.

PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.50; postpaid.

Golden Nugget Fruits are beautiful golden yellow, about as large as a hulled walnut. Flavor exceptionally fine, and a more desirable variety for eating from the hand or as a dessert fruit. We have grown them both on our farm and at our trial grounds, and were more than pleased. Plants were loaded down with beautiful, rich, golden yellow fruits of delicious flavor. Try them. They are extra fine.

PRICE: Large packet, 10c; oz., 50c; ¼ lb., \$1.50; postpaid.

Choice Northern Grown Seed Potatoes

Our Seed Potatoes Are grown exclusively in the Red River Valley of North Dakota and Minnesota. "Red River" stock always commands a premium over potatoes produced elsewhere. No seed potatoes can be compared with those produced in the North, either for vigor and freedom from disease, or for producing and long keeping qualities. The seed potatoes we send out are seed potatoes in every sense the word implies. They are not only the best we can supply, but the best to be had from any source at any price. To that end they are screened and hand sorted, selected stock such as anyone will be proud to plant. We personally superintend the cultivation and harvesting and loading of cars. Our seed is clean, healthy and free from scab; and, in order that the produce may be equally so, we urge our customers to treat the seed they plant with formaldehyde, as the soil may be infected.

Potato Culture Use 8 to 10 bushels of seed potatoes per acre. Cut in two eyes. Plant in rows 3 feet apart, and drop 10 to 12 inches apart in row. Cultivate constantly and thoroughly. Ridging with loose soil is often practiced, but it is not always necessary. Store in frost-proof cellar or pit in winter. Potatoes are planted both early and late.

Date of Shipment We ship our seed potatoes in the spring as soon as danger of freezing is over, so they will arrive in plenty of time for planting. All orders for potatoes are acknowledged as soon as received, and forwarded the first day that we feel it safe to start them. When shipment is ordered otherwise, shipment is made at purchaser's risk and we assume no responsibility on account of freezing. All potatoes are carefully packed and delivered to the railway company in good order and condition; then our responsibility ceases.

POUND PRICE: All varieties, 40c per lb.; 3 lbs., \$1.00; postpaid, except when otherwise noted.

Seed Potatoes

PRICES on potatoes frequently change as the market advances or declines. If you want a quantity, write us for special quotation. These prices subject to change without notice.

Early Ohio Potatoes

Fancy Northern Grown Stock.

We consider these to be the earliest, purest and altogether the handsomest stock of Early Ohio Potatoes to be found anywhere. On these points we challenge comparison with stock from any other source. We do not admit that its equal exists among Early Ohio Potatoes. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and the result is such as to delight everyone who knows and appreciates a good potato.



Extra Early Ohio (grown in Red River Valley).

The Early Ohio Potato is so well and generally known as to require no extended description. We believe it to be more popular than any other variety, which fact is evidenced by the very large demand for it. Our sales on this sort are many hundreds of bushels in excess of the quantity sold of any other one kind. They can be depended upon so uniformly to give a good yield under most all conditions and all soils and produce a tuber of an ideal size for early market use. Notwithstanding its earliness, this potato keeps well.

Our stock in the spring is as sound as a dollar. The accompanying picture of Early Ohio Potatoes in the illustration represents the stock of this splendid variety—smooth, uniform and of fine, typical shape. This potato is characterized by pink skin, shallow eyes, blunt eyes and a slightly pebbled appearance, peculiar only to this variety.

In anticipation of the unusual heavy demand, we have in stock a very fine and large supply of excellent potatoes.

Peck, \$1.25; bushel, \$4.00.

Early Irish Cobbler

In shape the Cobbler is round, with oval cross-section. Skin white, well netted. Flesh pure white. Eyes are very few and shallow. Its cooking qualities and flavor are first class. Tubers are of good size, no small ones, and very smooth and free from scab. The Irish Cobbler is one of the most reliable of the first early sorts and an unusually heavy yielder for an early potato, excelling in this respect many of the late main crop varieties. It ripens very evenly, every hill seeming to ripen at one time. Its strong growth, earliness, productiveness, fine eating quality and handsome appearance will always cause a good demand for the Irish Cobbler. **PRICE:** Peck, \$1.25; bushel, \$4.00.

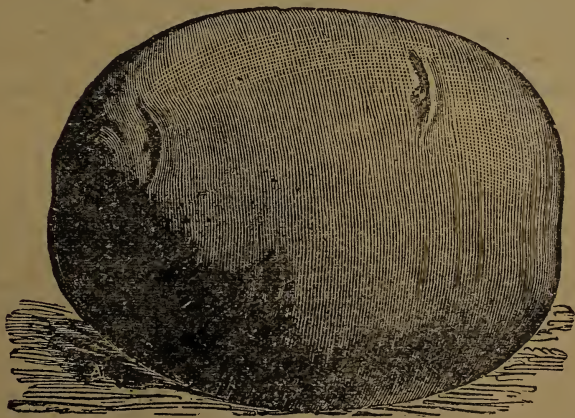
Bliss Triumph, Extra Early

Bliss Triumph is the standard extra early. We are all familiar with it as sold at the groceries where the first new potatoes are shipped in. The tubers are nearly round, smooth, medium in size, reddish pink in color.

Our Red River grown Triumphs cannot be excelled. The illustration shows them just as they look, smooth, round, very desirable in shape and size. **PRICE:** Peck, \$1.25; bushel, \$4.00.

Early Six Weeks

This is the best seeding of our grand Early Ohio, which is also the parent of several other good varieties. The Early Six Weeks outrivals all other varieties in extreme earliness, also excels in productiveness. The tubers are of a handsome oval form, almost the same in shape and color as the Early Ohio, but are not quite as much inclined to run elongated. The flesh is of extreme whiteness, both raw and when cooked.



Irish Cobbler—Extra.

The potatoes grow closely to the plant and are therefore easily harvested. Although the Early Six Weeks is such an extremely early variety, it is also a splendid keeper, remaining sound until late in the spring without wilting or sprouting. We have always had a very large demand for them.

PRICE: Peck, \$1.25; bushel, \$4.00.

Plant Dependable "Jefferson Brand" Seed Potatoes

Potatoes

CONTINUED

Eureka Extra Early

None More Quick to Mature, More
Proof Against Drought and
Blight.

A famous extra early, a little earlier even than Early Ohio. It has become immensely popular, and is much sought after, especially by market gardeners. The seed is always in demand and sells at a premium over other earlies.

Eureka Extra Early has never failed to produce a large crop of extra early potatoes. The plant is dwarf and compact, maturing in advance of the Early Ohio. It never has the blight. The tubers are round, white skin, free from disease. Flesh, white and mealy; no cores or black spots. Quality unsurpassed.

One point alone which makes it valuable is that it resists drought better than any other potato we have grown. North, South, East and West, Eureka the past summer came off with flying colors. We again advise early orders, for while our stock is large, the demand for Eureka is simply astonishing.

PRICE: By express or freight, peck, \$1.25; bushel, \$4.00.

We want everyone who plants potatoes to try some of our Extra Early Eureka Potatoes this year.



Eureka Extra Early.



Improved Early Rose Potato.

Improved Early Rose Potato

Northern Grown.

Every farmer and gardener knows the Early Rose potato, and nothing need be said in its favor. It has no faults. An extra early variety maturing only a few days later than the Early Ohio. The improved stock we are offering is an improved strain over the old Early Rose, which has been grown on the virgin soil of the far north. It is very early, being only a trifle later than the Early Ohio and much larger. Is smooth and of handsome rose color. Quality superb, either baked or boiled, and yields immensely. Keeps sound over winter and well into spring. This new strain is rapidly gaining the place long held by old Early Rose.

PRICE: Peck, \$1.25; bushel, \$4.00.

New Majestic

New Majestic was first offered to the public in 1910, since which time we have received hundreds of reports of field crops running up to 500 bushels per acre. On account of its earliness it is not affected by the usual midsummer droughts, while in keeping qualities it is unsurpassed by any variety under cultivation. The illustration does not in any way exaggerate its handsome appearance. It produces an unusually large proportion of merchantable tubers. The potatoes grow closely in the hill and are large and nearly uniform size. *It stands alone: the Great Majestic all purpose potato.

We wish we had space to tell you all we know about this wonderful Large Early Potato.

It stands to other potatoes as rich Jersey cream does to skimmed milk. As early as the earliest, and is better than the best. There is none like it. It has no equal.

PRICE: Peck, \$1.25; bushel, \$4.00.



Seed Potatoes Main Crop--Late Varieties

Mammoth Prize

We consider this potato the most valuable of all our introductions, for it excels in great productiveness and in choice table quality. It has distinguished itself as a perfect pure variety, never getting scabby, and on account of being of a strong, vigorous growth, it is but little affected by the ravages of potato bugs.

The Mammoth Prize is, beyond doubt, the largest choice eating potato in cultivation. It is of an oblong almost oval form, as shown in the illustration, and is of a yellowish-white color; is perfectly white fleshed and a grand cooker, retaining its flowery whiteness even when cold. The potato is late in maturing and ripens with the Carman. Growers for the market will not find another variety that is as productive and as profitable to grow as Mammoth Prize.

PRICE: Peck, \$1.25; bushel, \$4.50.



Mammoth Prize.

There is no other crop that responds to a change more readily and so profitably, as a change in seed potato. There is no other crop that runs out so quickly as do potatoes

Improved Rural New Yorker No. 2

One of the largest varieties in existence. Large and unusually smooth, with few and shallow eyes, skin white, as is also the flesh, which is of superior quality. Medium late and the best drought resister. There is no other potato of more handsome appearance than the Rural New Yorker. Although it is a large yielder it grows but few and small vines. It is very hardy and will stand the heaviest manuring without getting scabby or spotted. PRICE: Peck, \$1.25; bushel, \$4.00.

New (?) Varieties

There is nothing sold from seed catalogs in which so much humbuggery is exercised as in the item of seed potatoes. During the past few years hundreds of alleged new varieties have been introduced and sold at high prices, and yet there are not to exceed twelve standards and well-known sorts today.



Rural New Yorker No. 2.

Carman No. 3

The best main crop potato. The fame of this potato is unquestionably the very best main crop late potato on the market. All the Carman seedlings (originated by Mr. Elbert S. Carman, late editor of the Rural New Yorker) have proven popular; but the Carman No. 3 is already rivaling in popularity the Burbank, and is undoubtedly a much better potato. Without any exception whatever it is the **GREATEST YIELDING POTATO** ever introduced, and it may be fairly claimed that it does not yield any small tubers at all. It is of large size and of the shapeliest form. Eyes are few and shallow. It is a perfect keeper and is not surpassed as a table variety. Skin and flesh of extreme whiteness. It has no hollow hearts or any dark parts. We recommend this potato to our customers as being unqualifiedly **THE BEST** of all late sorts. PRICE: Peck, \$1.25; bushel, \$4.00.

Sir Walter Raleigh

One of Mr. Carman's latest and best introductions—a seedling of the Rural New Yorker No. 2. It must be acknowledged that Mr. Carman has originated some of the most popular varieties of potatoes now grown, notably the Rural New Yorker No. 2, and the Carman Sir Walter Raleigh resembles the Rural in shape, but is a little more buff in color; the flesh is also whiter. It is a little earlier than the Rural, and the tubers are more uniform with practically no small ones, every one being of marketable size. This variety is the whitest fleshed and finest grained potato, exceeding even the Snow Flake. At the originator's trial grounds it proved to be the best and heaviest cropper of 49 varieties. It is unquestionably the best of its type, being not only the finest eating potato, but also the heaviest yielder. PRICE: Peck, \$1.25; bushel, \$4.00.

A GOOD FARMER



From Iowa and
Proud of it

It is said that "the result of warfare depends very largely upon the men behind the guns." This is equally true of every human endeavor. The successful growing of a crop is no exception. "He that by the plow would thrive must either hold or drive" is as true as the Bible. In this day of advanced agriculture and high-priced land, success can only be attained by a good knowledge of the underlying scientific principles.

Anyone can farm after a fashion, but for best results aside from weather and climatic conditions there are three or four other essential elements, all of about equal importance, that must be combined in order that success may be assured. They are: A good farmer, good soil, good seed and good cultivation, mixed with brains and intelligence.

The chemical and mechanical conditions of the soil, the physiology of the plants as well as the philosophy of cultivation and plant growth must be understood by the farmer in order that he may be able to meet and overcome the ever varying conditions that confront

him, identical conditions not returning once in a decade. Having the knowledge, he will know when, how and for what purpose he cultivates. To illustrate: Suppose the soil seems quite fertile, but is inclined to pack and run together and become hard on the least provocation. It shows that the soil lacks humus, vegetable mould, or as some call it, fiber. The remedy is to apply a heavy coat of coarse litter, such as coarse manure, straw or stalks cut fine, or a heavy crop of some green stuff plowed under—any way to add decayed vegetable matter to the soil.

Or suppose there is too heavy growth of stalk, vines or branches and a light crop of grain or fruit. This shows there is too much nitrogen compared with other elements of fertility. The thing to do is to add phosphoric acid or potash to restore the proper balance, or continue to crop with some rank grower until the surplus nitrogen is taken up. Hence, we conclude the farmer must be a close observer, a good reasoner, a thinker and executor. But, however well informed may be the "man with a hoe," he cannot raise a good crop without good seed and good cultivation.



"JEFFERSON BRAND" Reliable Farm Seeds



First, after good Seed Corn, in importance as a substantial money crop to the American Farmer is Seed Wheat, Oats, Barley, Grasses, Clovers, Potatoes, etc. These are the money crops in which the farmer is most interested.

While we have given extensive space to the Seed Corn question, there can be no doubt that as wide opportunity offers to careful study and experiment in the growing of other farm crops, with the same success and results as have been attained in the improvement of corn and wheat since the agitation and progress made during the past few years. In fact, there is actual proof of this in our own practical experience as well as others who have planted and grown crops from our seeds within the past years. As in corn breeding, we were among the pioneers in the breeding and importing of new varieties of seed Wheat and Oats from foreign countries. Our methods for breeding oats are much the same as those in use at the Minnesota, Wisconsin and Illinois Experiment Stations, namely, record of single mother plants whose ability to yield has shown them to be exceptionally high and worthy of propagation. In this way our new varieties have been propagated and we actually believe and know that farmers who buy their seeds from us will have every reason to be glad of it, and will find their every investment made with us for farm and grass seeds a profitable one.

In addition to our many years of experience in the seed business, we have had years of practical experience on the farm. Yes, we have been up against the "real thing" itself.

We have experienced the same joys, thrills, and sometimes heartaches, that our customers experience every year with the outcome of their crops. It has all served to make us more anxious and more determined to secure and furnish for our customers, seeds of the highest grade only. From the time that we first engaged in the seed business, we have felt that the nearer we could keep in touch with the practical, intelligent, up-to-date farmer, the more valuable information we could gain, and through this source we have been inspired to make a great many experiments in the propagation and improvement in various kinds of farm seeds and crops. Each year since our business began, we have sent out thousands of letters of inquiry to all parts of the country with regard to results obtained from our seed, manner of planting, cultivation, as well as yields compared with other sorts. By reason of this wide and extended information we believe we are in a position to help and benefit many of our customers in making selection of seeds best suited to their climate and soil, which we are always ready and willing to do. In fact, we want to help and assist our customers in every way we can, and if they obtain good results or better returns from our seed than others get who buy elsewhere, we feel it is the best and most profitable advertising we can do. It not stands by us, for our seeds are recognized for their superior quality the world over.

With the liberal and continued support and hearty co-operation of the farmer, we shall in the future, as in the past, urge onward in the fields of new tests and experiments, believing that if we can get a new sort that will produce TWO BUSHELS WHERE ONE FORMERLY GREW, that we are doing the farmer a great good. Our success in this line in the past has been signal, and the farmer only insures a continuance of your patronage, but is an inspiration to your neighbors and friends to send to us for their seeds.



One of our Timothy and Clover Fields.



Recleaned Farm Seeds



We were among the first to introduce new and better varieties of Field Seed Corn. WE NOW TAKE PRIDE in our large and increasing trade in the FARM SEED part of our business. With our new and convenient building, improved machinery and equipment for cleaning, which are as perfect as any in the United States, we are enabled to clean and grade all kinds of seeds perfectly, far better than those commonly sold.

HIGH-GRADE SEED GRAIN. It costs more to grow a crop for seed purposes than the ordinary farmer can understand. In the first place it requires extra choice stock seed, specially prepared land, special cultivation, great care in harvesting, cleaning, testing, preparing for shipment, bags, etc., so we are obliged to ask a considerable advance over market prices, but any intelligent farmer will agree with us that such seeds are well worth to him, in the increased yield, all we ask.

HIGH-GRADE SEED THE CHEAPEST. By "High Grade" seed we mean that which has been handled so that all of its germinating power has been preserved, aided by a constitutional vigor implanted in the grain by a judicious selection, cultivation and environment that produces a pure or improved variety. This may be done by the common farmer, but is generally best done by the professional seed grower. He generally knows better how to do this and has the proper facilities for doing the work. This is a business of itself. It is generally known that seed companies make the most profit out of cheap seeds, even though they are sold for much less than the better grades. This is due to the fact that it costs practically nothing to produce cheap seeds. Yet cheap seed in the long run is twice as expensive to the good farmer. This can be better illustrated by following the analysis of two lots of red clover which was offered to us last season, sample No. 1 at \$40.00 per cwt., sample No. 2 at \$20.00 per cwt.

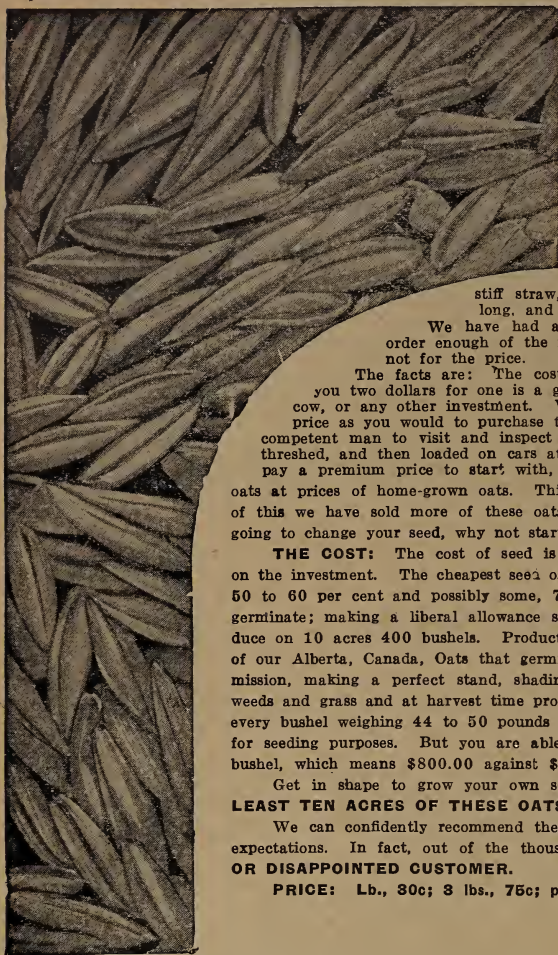
	Sample No. 1.	Sample No. 2.
Percentage of weed seed.....	.09	25.78
Percentage of dirt, sticks and trash.....	1.08	26.16
Percentage of red clover.....	98.83	48.08
Percentage of red clover germinated.....	98.86	18.25
Actual cost per cwt., red clover seed that germinated.....	\$44.40	\$110.00
Number weed seed per pound.....	150	139,727

It is needless to say we did not buy the cheap seed. The farmer who buys this kind of seed makes an expensive investment. The same rule holds good all along the line when it comes to buying and planting seeds for your crops.

PRICES ON FARM SEEDS are subject to market changes. Clover Seed, Grass Seed and many others are constantly varying in value. It is best to write for quotations unless your order is sent right after receiving the catalog. However, orders sent us at any time will always be given the benefit of lowest prices on day the order is received. We will take pleasure in mailing samples or quoting inside prices on large amounts at any time on request.

SHIPPING. In this department everything quoted by the packet or pound will be sent by mail, postpaid; all large quantities will be sent by freight or express at purchaser's expense, unless instructions and parcel post charges are included in your remittance. See parcel post rates on page —. All prices named include BAGS FREE. Everything delivered free in good order f. o. b. Jefferson. **FREIGHT RATES** will be much less than you expect. However, we want to call your attention to the fact that railroad companies usually charge no more for 100-pound shipments than for less amounts. Should you want less than 100 pounds of seeds, **YOU CAN EQUALIZE OR REDUCE THE COST OF TRANSPORTATION** by getting someone to send with you. Simply see some of your neighbors and friends and ask them to send with you, and advise us to ship all orders to one person, in one shipment. If each customer writes or makes out his own order under his own name, it will be a very easy matter for us to keep each customer's seeds separate, and the freight charges will be next to nothing when shared by several persons. **IF YOU LIVE AT A DISTANT POINT** and wish to order some article or seeds that would weigh but fifteen or twenty pounds, it would be cheaper and safer to have your seed sent by express.

REMEMBER WE GUARANTEE ALL SEEDS TO BE AS REPRESENTED, AND IF FOUND UNSATISFACTORY UPON RECEIPT AND EXAMINATION YOU MAY RETURN THEM AT OUR EXPENSE ANY TIME WITHIN TEN DAYS AND MONEY WILL BE REFUNDED PROMPTLY. ISN'T THIS A FAIR OFFER?



OATS

PURE GENUINE ALBERTA, CANADA,
GROWN OATS

The New Alberta—What They Are Like

The Biggest, Best and Grandest variety ever introduced into this country. **A BIG HEAVY YIELDING WHITE OAT.** The bordering on corner of this page is a correct illustration of kernels of these oats. You will notice they are a big, fat kernel, big enough to please anyone looking for something a little better than anything ever seen in the oat line, and an oat that weighs out from 44 to 50 pounds to the measured bushel and making a yield of 90 to 125 bushels to the acre. Ripens early for a large oat. Has a big, strong, stiff straw, standing upon any kind of land, spangled head from 12 to 18 inches long, and some even longer.

We have had a thousand farmers write us, when ordering Seed Oats, that they would order enough of the new Alberta, Canada, grown oats to sow, 25, 50 or 100 acres, if it were not for the price.

The facts are: The cost of the seed has nothing to do with it. Any investment that will give you two dollars for one is a good investment, whether it be for Seed Oats, Seed Corn, or a horse, dog, cow, or any other investment. We would be just as glad to sell you our Alberta, Canada, oats at market price as you would to purchase them at that price if we could afford it. But when we have to employ a competent man to visit and inspect growing crops suitable for seed purposes before harvest and remain until threshed, and then loaded on cars at heavy expense, then pay freight from western Canada, 1,800 miles, also pay a premium price to start with, including other incidental expense, it is easy to see we cannot sell these oats at prices of home-grown oats. This being so manifestly plain, it is a question that solves itself. As proof of this we have sold more of these oats during the last five years than any of our other varieties. If you are going to change your seed, why not start with the very best, most improved varieties possible to obtain?

THE COST: The cost of seed is a secondary matter. It's a matter of yield, quantity results and profits on the investment. The cheapest seed oats you can buy costs you from 75 to 90 cents per bushel; they germinate 50 to 60 per cent and possibly some, 75 per cent, or one-half to one-fourth chaff, hulls or seed that will never germinate; making a liberal allowance seldom ever yield over 40 bushels per acre; thus at best they would produce on 10 acres 400 bushels. Product at 40 cents per bushel brings you \$160.00. Suppose you sow 10 acres of our Alberta, Canada, Oats that germinate 100 per cent or close to it, every kernel starting off on a business mission, making a perfect stand, shading the ground with a big, robust growth and foliage that smothers the weeds and grass and at harvest time produces 90 to 125 bushels per acre, or safely estimated, yields 800 bushels, every bushel weighing 44 to 50 pounds per measured bushel, worth only 50 cents per bushel, total \$400.00, even for seeding purposes. But you are able to sell every bushel you raise to your neighbors for seed at \$1.00 per bushel, which means \$800.00 against \$160.00.

Get in shape to grow your own seed another year, and supply your neighbors with their seed. **SOW AT LEAST TEN ACRES OF THESE OATS THIS YEAR.**

We can confidently recommend these oats and assure all our customers that they will come up to your full expectations. In fact, out of the thousand bushels we have sent **WE HAVE NEVER HAD ONE COMPLAINT OR DISAPPOINTED CUSTOMER.**

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for bushel prices.

The New Kherson Oats

Without a Spot. Without a Blemish.
Without a Flaw.

The New Kherson Oats are without a comparison—the best Extra Early Oat that has ever been introduced into this country. Best in every respect. They are the earliest to ripen. They are the most productive. They are rust-proof. They are of medium short, strong straw and stand upon the richest make themselves early in the season before dry weather sets in. They yield more per acre than any of the late varieties. They always make a certain crop, regardless of wet or dry weather, if your ground is properly prepared, as it should be for any kind of a crop, from mustard seed to the corn crop. Nothing but a hailstorm will prevent you from securing a 100-bushel-per-acre crop if you do your part.

We take the following description and tests from Bulletin 82 of the University of Nebraska, Prof. Taylor, Superintendent of Institute of Nebraska:

"This Oat has proven itself of such outstanding merit in tests at this station and among co-operative experimenters that it deserves special mention. The oat was obtained of the Kherson government, where the variety originated. A description of the soil and climate of that region will serve to explain why the Oats are so well adapted to this region, where they are raised without irrigation. The Kherson government of Russia lies in the Black Earth region, which is very similar to that of our own Great Plains. Climate is similar also, but possesses even greater extremes of heat and cold, and is more uncertain as to rainfall."

"The plant is vigorous, but not a rank grower. The straw is short, and on the same land stands shorter than other Oats tested at this station. The leaves are very broad and expose a large surface. The panicles are spreading. The berries are light yellow in color; small, but numerous, and have a very thin hull. They usually weigh well per bushel, and in this respect, as well as in yield per acre, they have led all other varieties at this station."

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.



Formerly Jefferson-Ratekin Seed Co.



[Famous Iowa 103 Oat

The Iowa 103 has created a greater sensation than any oat ever introduced. A new production from the Iowa Experimental Station in 1913, it soon gave promise of being the greatest early oat in existence and in 1914 and 1915 established themselves by winning the "Sweepstakes on all Oats" at The International Dry Farming Congress. It is undoubtedly the highest yielding strain of early oat ever introduced. Our customers, needing a good early heavy-yielding oat, cannot possibly do



Big Banner Oats.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for bushel prices.

better than give the Iowa 103 a trial. It has been tried largely in the Western and all Corn-Belt States and wherever grown has outyielded all other varieties in the same neighborhood from 10 to 30 bushels per acre. We do not hesitate to offer it as the best Oat for the West and all Corn-Belt States as yet produced.

Mr. J. M. Baker, our Grower, says: "I have been raising Oats for years, but never have I raised such Oats as the Iowa 103. Bred from the old Yellow Kherson, they retain all the good qualities of the Kherson and in addition are a better color, being pure white and a much greater yielder. The grain is not so large as the Silver Mine Oat, but more plump and heavier and with very thin hull. The Iowa 103 Oat matures early before the hot, dry season sets in and before blight and rust appear. It has also proven to stand up extra well on heavy, rich soil and wherever the ground is rich and oats lodge or run to straw these new Oats will prove of great value."

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

BIG BANNER 100-BUSHEL OATS

We believe among all that is good "BIG BANNER 100-BUSHEL WHITE OATS" to be the best American oats grown and equal or superior to any oats found in this country. They are big, plump and pretty. Grown side by side with other varieties they have frequently made a yield of 100 bushels per acre where any other varieties made but 35 to 40 bushels. Hundreds of our customers have written us that on account of their earliness, enormous yielding qualities, freedom from rust and wonderful stiff straw, standing up under wet weather conditions that caused other varieties to lodge and go down and that there was **NONE LIKE BIG BANNER 100-Bushel White Oats**. They undoubtedly stand pre-eminently at the head of all American grown OATS.

DESCRIPTION AND POINTS OF SUPERIORITY: First, these oats have a big, plump white kernel and thin hull. Its quick, strong, robust growth from the start. A shorter, stronger, heavier straw than any of the heavier yielding varieties. Its vigorous root system, enabling it to resist dry weather and drouth. Its early ripening and maturity. Its freedom from rust, blight or smut. Its large kernels being solid and full of meat, almost as heavy as wheat, weighing out from 38 to 44 pounds per **MEASURED BUSHEL**, combining all the best points and qualities of all **THE BEST AMERICAN VARIETIES OF OATS IN EXISTENCE**.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

TEXAS RED RUST-PROOF OATS

The Best Oats for the South, and a Good One for the North, East or West.

Our Texas Red Rust-Proof Oats were originated in Grayson county, Texas, one of the central northern counties, abutting southern Oklahoma, some twenty years ago, where they, at first, made a most phenomenal record as being absolutely rust-proof, as well as a marvelous yielding variety.

We can unqualifiedly recommend these Oats as being among the best of the best varieties for hardiness, productiveness, and as surest croppers under all conditions.

While we are not a knocker, we may be allowed to say that from reports that came to us, if true, more than 75 per cent of all the Texas Red Rust-Proof Oats sold for seed are more or less mixed with other varieties. With us, however, we have always been extremely careful in our seed crops, and our stock may be depended upon to be absolutely pure.

DESCRIPTION: The Texas Red Rust-Proof Oats are not a handsome oat to look at, but what they lack in beauty they abundantly make up in certainty of crop and yield. They grow to a medium height, 3½ to 4 feet tall, have sprangle head well filled with grains, often running 100 to 125 kernels to the head; also a splendid stooler. The grains or kernels are of a yellowish-red cast, with a husk extending well out over the tip ends, hence do not weigh out quite as heavy per measured bushel as some other varieties, but easily make up this difference in bushels. In brief, we can most heartily recommend these oats and their adaptability to any place where oats are grown, and especially recommend them to our Southern friends and customers.

Early Champion Oats

Early Champion

They are an old, well-established and well-known sort. Time tried, thoroughly tested and always a sure cropper. Every farmer knows what to depend upon when he sows them, namely: They can always be relied upon for a large yield and a sure crop. In fact, the IOWA EXPERIMENTAL COLLEGE recommends them very highly as among the best yielders and the best for spring nurse crop to grass and clover. They grow a short, very stiff straw, always stand up well and ripen very early. Wallace's Farmer says: "We would rather risk growing grass with Early Champion and Kherson Oats than any other varieties known or grown."

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

Silver Mine Oats

This Oat has a reputation as an exceedingly heavy and reliable yielder. It is very hardy and prolific and yields beautiful white kernels, which are especially desirable for the manufacture of rolled oats.

The heads are very large in proportion to the stiff, bright clean straw. The sprangle top heads, although long, are borne low down on the stalk, which seems to prevent lodging. The demand for this variety last season exhausted the supply and we suggest early orders to avoid disappointment.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

Giant Hulless Barley

Hulless Barley

No beards or hulls. The grain looks like wheat. Equal to wheat in feeding value, and yields twice as much. No barley has proved as valuable to the stock raiser as the Giant Hulless.

The yield varies according to soil and climatic conditions, but it can be depended upon to produce from 50 to 80 bushels an acre. Its nutritive value is very great. It is fed to work horses at the rate of two quarts, where four quarts of oats would be required. The best way is to mix it with oats and grind or soak six hours in water for horse feed. It is also very valuable for feeding poultry, hogs and all kinds of stock. As fattening feed for hogs it has no equal. It makes sweeter meat and nicer lard by far than corn.

There is positively nothing that will give to your cattle better health and add to their weight quicker than feeding Hulless Barley. Indeed, feeding them twice daily on Hulless Barley and once on corn will add more fat and better fat and add it quicker and for less money than feeding on corn alone. We know this to be true, because we have demonstrated it repeatedly.

PRICE: Lb., 30c, 3 lbs., 75c; postpaid. See enclosed pink price list for bushel prices.

Speltz or Emmen

It's the Richest Stock Food That Grows

SPELTZ IS A CEREAL—A SMALL GRAIN CROP TO SOW. It has **TEN THOUSAND POINTS IN ITS FAVOR AND NOT ONE BAD ONE**—Is good for everything any other cereal crops are. It's good for pasture; fattens in the green state. It makes the best of hay. It grows a 100-leaf stalk from one seed. It's the most profitable hay and grain food combined on earth. It will grow anywhere that any other grain crop will. It's the greatest drouth resister in the world, never affected by rains. It

neither rusts, blights or lodges. It matures earlier than oats or spring wheat. It yields 10 to 20 bushels more per acre than oats; it's equal to corn, barley, oats or rye as a food. Hogs squeal for it; cattle bawl for it, and horses neigh for it. One farmer said: "IF YOU SOW SPELTZ FIVE YEARS YOU CAN WEAR DIAMONDS, and your wife CAN WEAR SILK AND SATIN," and when your friends come to visit you, you can take them out in an automobile. It's the surest crop ever planted. It yields enormously. It's the richest food out. We try every seed under the sun. Speltz surprised us; it completely captured us.

(Continued on next page.)



What Is Speltz? It Is the Richest Stock Food That Grows—Continued.

How nature takes care of man! Several years ago the fattening of hogs in the Dakotas, Montana and the North was thought impossible. Then came Beardless Barley, Speltz and Earliest Corns. These are the things that made it possible to fatten hogs anywhere on earth, and do it cheaper and better than with corn alone! Speltz is a richer food than corn. For fattening cattle and swine it is unapproachable. It cannot be beat. It fattens. It does this easily and well, and makes the best of pork and beef, and so cheaply! You can grow it anywhere; where wheat or oats will grow, Speltz will also thrive. Try it this year and be happy. Everything eats it and grows healthy, hearty and fat. It will surprise and please you. Try Speltz, Rape, Billion Dollar Grass, Sudan Grass, the won-

der of the age, and Earliest Cane, and you have the greatest combination of foods for stock on earth."

Culture of Speltz is simplicity itself. It's sown in the spring in the North; in the winter and spring in the South. Prepare your ground as you would for wheat or oats and sow at the rate of two bushels or 80 pounds to the acre. Cut when in the milk and it will make a splendid hay crop. For grain crop cut when ripe and thresh same as other small grain. It is extremely hardy and can be sown earlier than spring wheat or oats; a light freeze or frost will not affect it. Speltz is one of the things we delight in urging you to sow. You will never regret it, when once you sow it. We have made our prices very low. We want every farmer who receives this catalog to try 10 or 20 bushels; the more, the better pleased you will be.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for peck and bushel prices.



Success Beardless Barley This is a new six-rowed barley, and as the name indicates, without beards, which is the most valuable improvement ever made on barley. It is a vigorous grower, producing strong, short straw and heavy, well-filled heads. Its earliness is one of the most important features, as it can be cut and put out of the way before the wheat and oat crop are harvested. On good land it has produced 80 to 90 bushels per acre, and as much as 125 bushels in favorable seasons. In regard to soil, it is not particular, as a good crop of beardless barley can be raised on land too poor to produce a crop of wheat or oats. It is a first-class malting barley, and equally good for feeding stock, therefore always bringing the highest market price. It should not be mistaken for the beardless, hullless barley which is described on preceding page, and which is grown for feeding purposes only. Ever since this new barley was introduced, there has been such a demand for it that we were always short in supplying our trade, and we anticipate another great rush for it this year.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for bushel prices.

Manshury Barley This grand barley was introduced from Asia by the Ontario Agricultural College several years ago, and is one of the most valuable varieties ever introduced into this country, greatly outyielding the old renowned Manshury Barley. It is an early six-rowed variety, maturing in 80 to 90 days from time of sowing, and is adapted to all kinds of soil and climate; is very strong strawed, stools well, and bears large and well-filled head of plump grain which possess malting qualities of the highest order. Another important factor is its nice and bright color, which will not turn dull and yellow when exposed to rainy weather, as most other varieties do, and on this account it will always be in good demand by the brewers and commands the highest market price. A good malting barley always sells at least 10 to 15 cents above discolored which can only be used for feeding purposes. By growing the Manshury instead of some common variety, one can easily gain from \$5.00 to \$10.00 per acre.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

Oderbucker or Wisconsin No. 55 Barley

We presume that more barley is produced per acre in Wisconsin than any other locality. The reason for this is evident. In that state are located the largest breweries in the United States, if not in the world. On account of the breeding of barley to obtain big yields. Qualities are essential for both brewing and feeding purposes. Oderbucker or Wisconsin No. 55 is considered the best variety of barley sent out by the Wisconsin Station. Prof. Moore declares it to be superior to Manshury, yielding 5 to 10 bushels more an acre. The original stock of this barley was obtained in Germany, by the Ontario Agricultural College, from which place the Wisconsin Experiment Station procured a small supply. By them it was disseminated. Oderbucker is a stiff-strawed, heavy-yielding, six-rowed, bearded variety. It is the same as Manshury in time of maturity and general appearance, but has a plumper kernel and weighs more to the measured bushel. "In stiffness of straw and rust resistance it is superior to any other variety."

It has protein content nearly double the amount found in many other varieties. This makes it a valuable feeding barley, which is an important consideration with the leading farmers and stockmen, who are now appreciating more the value of barley as a feed for all kinds of stock, horses as well as cattle. On account of its large percentage of protein, it is also one of the best malting barleys.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

Mammoth Spring Rye

I want to tell you something about Spring Rye, and that is: "It's a money maker in the fullest sense of the word. The yield is always big and the demand for same growing with each season. Mammoth Spring Rye would be ashamed of itself to yield less than 40 bushels per acre—and at that yield would make you 400 bushels."

This magnificent Rye is of recent introduction. It is distinctly different from Winter Rye, but can be successfully grown anywhere. Winter Rye is grown and fills every requirement of Winter Rye, but should be sown only in the spring. It has proven to farmers a big money maker and an easy maker, as good Spring Rye brought as good price as wheat and yielded from 10 to 20 bushels per acre more. We have but a few hundred bushels of this Rye, and we request our customers to order early, as it is the early bird that catches

this Rye, as later on in the season it will surely be sold. It can be sown at the same time Spring Wheat is sown, at the rate of two bushels per acre, if sown alone, but it is much used as a forage crop and grown together with vetches and oats. It can be sown later than other spring grain and on that account it is much used as a catch crop where winter grain has been killed out.

Our seed is grown on our own farms and not bought in the open market; we can therefore vouch for it being Genuine Spring Rye. Many have been disappointed in receiving Winter Rye as a spring variety and we wish to emphasize the fact that we sell the genuine Spring Rye, sown in the spring and harvested the same season.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for peck and bushel prices.



Manshury Barley.

New Mammoth Wonder White Rye

Mammoth Wonder White Rye We consider winter white rye one of the most important of all farm crops. In the first place, it is a sure crop, failures being unknown. Every farmer should have at least a few acres of it. It is sown in the corn, before the plows, at least plowing, also later, as late as November 1st in the fall, and as it grows vigorously will furnish pasture till late in the fall and early winter, also early in the spring before grasses have made a growth. So it is

of great value to dairy farmers. If sown early in the spring it makes an early and abundant pasture, but makes no grain crop. Our Mammoth Wonder Rye is of extra quality. It will please you no matter whether you want it for pasture or grain. Grown for grain alone it will make money for you. Fifty bushels per acre have been procured.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.
See enclosed pink price list for peck and bushel prices.

New Varieties of Spring Seed Wheat

The Cost Attached to the production and procuring of pure high grade Seed Wheat, including the cleaning and grading, an expense attached to it in preparation for "SEED" anyone who has not had experience cannot possibly appreciate the expense; therefore we are obliged to ask and sell our Seed Wheat at a considerable advance over market prices, marketed for milling purposes, which does not require absolutely pure varieties. Considering these facts, we believe that farmers want to purchase and procure seed wheat, or want to make a change, will find it very much to their advantage to purchase

their Seed Wheat from us. We at least hope you will give us a trial.

Sow Only Pure Bred Varieties All reliable authorities agree that pure bred seed produces from five to ten bushels better yield per acre under ordinary conditions than mixed or mongrel varieties, and it always commands from 5 to 15 cents per bushel more on the local market than mongrel sorts, simply because there is that much difference in the markets at the great milling centers.

Marquis Wheat, the King of All Spring Wheat

IT IS TEN DAYS EARLIER; PRODUCES 10 BUSHELS MORE PER ACRE; HAS A HIGHER MILLING AND BAKING QUALITY THAN ANY OTHER HARD SPRING WHEAT KNOWN TODAY.

The Wheat that won the \$1,000 prize at the New York Agricultural Exhibition for the best wheat grown on the continents of North and South America.

It combines all the qualities so earnestly sought after by the cerealist and devotedly hoped for by the grain growers of the West.

Origin Marquis Wheat was originated by Doctors Charles and William Saunders, of the Central Experiment Station, Ottawa, Canada, by crossing the Red Fife and the Hard Calcutta, a native wheat of India which had become acclimated to northern conditions. The first experiments were conducted in 1886, but it was not until 1903 that it was fully developed. By scientific cross breeding a variety was produced that inherited the remarkable earliness of the Calcutta and the resistant and yielding qualities of the Red Fife. The original stock of seed was very small, but by careful husbandry the amount was gradually increased so that it might be disseminated throughout America.

A Prize Winner Marquis Wheat won the One Thousand Dollar Prize offered by Sir Thomas Shaughnessy for the best wheat in America, at the New York Grain Exposition in 1911. It also won the Three Thousand Dollar prize at the International Dry Farming Congress at Leth-

bridge, Alberta, in October, 1912, in a competition open to the whole world. Marquis Wheat was again successful in winning the sweepstakes prize at the Dry Farming Congress held at Tulsa, Okla., in 1913.

Earliness Marquis Wheat is ten days earlier than Red Fife, and this fact alone should induce our customers to grow it this spring. Read what Mr. James Austin says about earliness and what it means to the wheat grower at a time when rust, smut, drought or hot winds may take his crop at any time. These ten days may save his entire crop from loss.

Productiveness Marquis Wheat has outyielded all other Spring Wheats grown under the same conditions of soil, cultivation and climate. The increased yield varies from 5 to 10 bushels per acre. A five years' average yield at the Brandon Experiment Station was 44 bushels per acre.

Quality Marquis Wheat has by all milling tests shown a higher percentage of gluten, a better color, greater absorption and heavy weight per bushel of grain. This question of quality is of great importance to the wheat grower when he comes to dispose of his crop at the mill or elevator. Almost without exception, Marquis Wheat will grade No. 1 hard.

Appearance Marquis Wheat is similar in appearance to Red Fife, but the heads, as a rule, are heavier and the straw shorter, making it less likely to lodge. The kernel is flinty, a little darker in color than Red Fife, being dark red, and more plump than that variety. It is beardless, having smooth, yellow chaff. It weighs from 64 to 66 pounds to the measured bushel.

Price We have made the price reasonable. Considering the increased yield, finer quality and earliness of Marquis Wheat, the first cost of the seed is returned many times over in the additional value which may be secured for the crop.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.
See enclosed pink price list for peck and bushel prices.

Macaroni or Durum Wheat

GREAT YIELDS: ONE FARMER GETS 71 BU. PER ACRE; ANOTHER 62 AND ANOTHER 52.

Macaroni Spring Wheat Grand Macaroni. The wheat that defies rust, that fearful scourge. The wheat defying all climatic conditions, disease, insects and rust—everything; a yield bordering on the marvelous. A Great Drought Resister; Rustproof. Sent out by the United States Department of Agriculture, under strong recommendations as to its great value for semi-arid lands where good crops of spring wheat cannot be grown or produced under ordinary conditions, and it has more than justified every claim made for it. Yields 50 per cent greater than any other variety of wheat. Many farmers report enormous yields. One writes: "I obtained 62 bushels to the acre, another 71, another 52, another 48 and another 49." It is always a sure cropper everywhere and will mature in a shorter period than any other variety of spring wheat. It is especially adapted to the Dakotas, Minnesota, Iowa, Nebraska, Colorado, New Mexico, Kansas, Oklahoma, Texas and Arizona. It does well on poor land and gives enormous yields on good soil. The grain is very hard and closely woven, translucent, and rather large. Heads bearded, compactly formed and well filled. It

should be sown as early in the spring as conditions will permit.

This Wheat especially comes into play in the dry, arid, hot regions of the United States. Take the Dakotas and western Nebraska and Kansas and Colorado and Montana and Arizona, Wyoming and Texas—in fact, in any of these states and every other state in the Union, this Wheat can be grown and will return yields far beyond the average spring or winter Wheat known today. On our lands we have repeatedly had from 40 to 60 bushels per acre. It does magnificently in Texas and a large number of our customers have grown it in that state. In Dakota and other states, where it has been grown in Russian settlements for 12 or 15 years, also in Nebraska and other western states, it is ground in the local custom mills for flour, and no other will be used when once tried. It is a wheat that gets along with less moisture than any we know of, and the yield is always good. It will do well in any state of the Union, though it is best adapted to soils rich in humus and containing a good portion of potash, phosphate and

(Continued on Next Page.)

Macaroni Spring Wheat—Remarkable, Productive, Early, Unexcelled—(Continued)

time. The United States Department of Agriculture says that the Macaroni Wheat stands foremost among all wheat groups in its excellent adaptation to regions of intense heat and drought.

The straw is strong, seldom troubled with insects and diseases that affect other wheats. Rust is also unknown on Macaroni Wheat; it is indeed the only wheat that defies anything—diseases, insects, unfavorable climatic conditions—and gives a yield that astonishes everybody, bordering on the marvelous. Macaroni is a very hard wheat and when it was first begun to be grown in this country the big mills of the country discriminated against it, because they could not get enough to justify a grind, but since the wheat is being grown extensively all over the wheat growing districts of the country, the big mills are anxious to obtain it in preference to hard Minnesota spring wheat, and it now commands a premium of 5c to 10c per bushel above No. 1 Minnesota hard spring wheat, and even reached the price of 18c per

bushel over No. 1 Minnesota hard wheat during the winter of 1915, at Omaha, Minneapolis and Chicago, and the demand became so great for pure varieties for seed purposes that seedsmen were compelled to advance their prices for seed to \$3.25 to \$3.50 per bushel. It is a sure cropper and a great money-maker everywhere.

Macaroni Wheat has compactly formed bearded heads; the grain is large, hard and glossy, of yellowish color, often translucent. The grain being large and not stooling very heavily, 1½ to 2 bushels are required to sow per acre. There are many kinds of Macaroni Wheat, only a few possessing good milling qualities. Kubanka No. 5639 is the richest in gluten, and wheat of this variety sells in the milling markets at a premium over and above No. 1 hard spring wheat.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid.

See enclosed pink price list for peck and bushel prices.

Iowa Chief This variety of spring wheat has been selected and bred by us and our seed stock grown under our own supervision until it has attained such a high standard and quality we feel justified in giving it a distinct name. All who have seen this wheat, both the grain and the crops, compliment us on its superior quality and yield. It is as nearly pure as wheat can be and by cross breeding we have produced one of the most vigorous strains of spring wheat we have ever seen, which goes far in increasing the yield, its early maturity and reducing the damage by rust, bugs and storms. It is a hard bearded variety, the kind that produces the best milling wheat and finest flour that can be made, as well as the most pounds of flour to the bushel. In addition to this, it is adapted to any locality where spring wheat is grown.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.

See enclosed pink price list for peck and bushel prices.

Big Red Fife Spring Wheat This is the wheat used in the Orange Judd Farmer contest of 1905, and is stock selected by Professor Shaw and the Orange Judd Farmer and American Agriculturist as being the purest and healthiest stock of hard wheat to be obtained anywhere at any price. It is the wheat that made Minneapolis flour famous and is undoubtedly one of the finest stocks of milling wheat in existence.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.

See enclosed pink price list for peck and bushel prices.

Minnesota No. 163 Fife Wheat Of the many crosses obtained within the past twelve years, the one sent out by the station as Minnesota No. 163 takes a high rank. The heads are long, well filled with medium-sized plump kernels. Flour made from this variety show a higher gluten test than most sorts. The straw is medium height, very strong and wiry. At the station farm this variety averaged two to five bushels an acre more than the Fife and Blue Stem varieties. The average yield of Minnesota No. 163 Wheat for the past thirteen years has been 26.4 bushels an acre. This tells a story which should interest every intelligent grower of spring wheat. Our crop was grown in North Dakota on land which had not grown wheat for a number of years, and is pure.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.

See enclosed pink price list for peck and bushel prices.

Minnesota No. 169 Blue Stem Wheat In this we offer the second new wheat originated at the Experiment Station. It is a progeny of Haynes' Blue Stem. Its average yield for four years as compared with the parent variety, is given by the Experiment Station as follows: Haynes, Blue Stem, 22.5 bushels an acre; Minnesota No. 169, 28.3 bushels an acre.

This comparison with its parent, which is a superior variety, tells the whole story as to yield. This is the best Blue Stem Wheat of which we have knowledge. It has given an average yield during 14 years, through favorable and unfavorable seasons, of 26.7 bushels an acre. No better wheat for Minnesota and the Dakotas is grown. In quality it proved in milling tests equal to the best.

PRICE: Lb., 35c; 3 lbs., 60c; postpaid.

See enclosed pink price list for peck and bushel prices.

OUR VARIETIES OF WHEAT ARE THE MOST PROLIFIC AND THE QUALITY OF THE SEED EXTRA CHOICE. THEY WILL ANY OF THEM PLEASE AND PAY YOU TO SOW.

Hardy Northern Grown Winter Seed Wheat

Iowa Chief Spring Wheat.



A photograph of an 80-acre field of Malakoff Wheat, yielding 62 bushels to the acre, grown in 1912 by John McLaren, Fremont County, Iowa. Another Fremont County farmer grew 1,192 bushels on 20 acres same year; average 59½ bushels. "Malakoff," "Turkey Red," hard headed; "Fultz" and "Minnesota Red Cross," soft beardless. Four hardiest, heaviest yielding and surest croppers grown, best for the North, South, East and West.

Write for prices on Winter Wheat after July 1st.

Sow Dependable "Jefferson Brand" Seed Wheat

Buckwheat---Superior Varieties

HARVEST WINTER WHEAT OR RYE AND SOW BUCKWHEAT. GET TWO CROPS IN ONE SEASON.

JAPANESE BUCKWHEAT



This is Larger Than the Common Variety.

Buckwheat is a "catch crop," easily grown between regular succession crops. Also valuable as a weed extirminator and green manure. It will grow best on light soil, and it will flourish under greater rainfall than other grains. As a second crop Buckwheat cannot be surpassed.

New Giant Japanese Buckwheat We want to urge and beg farmers to plant more buckwheat. It pays—it pays handsomely. Buckwheat will even do well on lands low in nitrogen. Buckwheat pays everywhere, on any kind of soil, rich or poor. Try it this summer. The famous distinct variety. Entirely distinct from all other varieties. It has the advantage of remaining for some time in bloom and produces seed earlier. On this account it can be grown farther north. It resists drought and blight. The seed is rich dark brown in color and larger than Silver Hull. As much as 60 bushels to the acre have been harvested of this variety, making it very profitable to raise.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.
See enclosed pink price list for bushel prices.

Silver Hull Buckwheat This valuable variety is a decided improvement on the old black or gray sort. It is early, remains longer in bloom than other sorts. A fine variety for honey bees. The grain is of a beautiful light gray color and has a thin husk. Millers prefer Silver Hull, there being less waste and it makes whiter, better and more nutritious flour than other varieties. Silver Hull is more productive and the grain meets with a more ready sale, bringing higher prices than the Japanese. Under favorable conditions it will yield 40 to 50 bushels an acre.

PRICE: Lb., 25c; 3 lbs., 60; postpaid.
See enclosed pink price list for bushel prices.

New Calcutta Buckwheat This variety comes from India and rivals the celebrated Japanese Buckwheat in productiveness, yielding as high as 75 bushels per acre. Its kernels are smooth and fine, and it is in great demand as a milling buckwheat.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bushel prices.

Successful Catch Crops--Dry Weather Crops

Drought Proof Forage Crops We want to say a few words here about Spring Crops, Summer Crops, Dry Weather Crops and Sure Crops; crops that can be depended upon for grain, feed and forage under almost any conditions, a number of them that can be planted very late, in June, July, August, and some as late as September, especially in the South. A number of them can be planted or sown after small grain is cut and taken off the ground, also after such crops as early Corn, Potatoes and such like. Rye can be sown in front of the plows at last plowing and will make an abundance of the most valuable fall pasture. But we wish more especially to draw attention to the different Sure Crop, Feed and Forage Crops listed and described for late planting.

Feterita This is a combination grain and forage plant introduced into the United States only a few years ago from the Sudan region in Central Africa. Feterita has now been thoroughly tried out in every part of the United States and proven to be the best and most valuable combination grain and forage plant ever introduced into this country, especially in localities subject to drought, but does well everywhere; in every region and every climate. It grows 6 to 9 feet high. It is planted and cultivated similar to Corn or Maize. However, we consider this a much more valuable crop than Maize. It is from 15 to 20 days earlier than Maize, makes 15 to 30 bushels more per acre, and the forage is far superior to either Maize or Corn. The stalk is slender and the sap is sweet like sorghum (sugar cane), and makes excellent forage. Feterita has proven to be the greatest except, possibly, Sudan Grass, of all the sorghum family, making good grain and forage even when Maize and Kafir and other crops failed. The grain is about three times as large as Kafir and is pure white. It grows even in height and is the prettiest crop we have ever seen growing. It needs no fertilization, but will make paying crops on land too poor to make corn or other crops. Yet it is not indifferent to good soil. We have a choice lot of Feterita this year, grown from our own crops here, especially selected and re-cleaned, and want every farmer who has stock or poultry to try a few acres of it. It will not disappoint your best expectations. It's one of the best poultry foods there is grown.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for bushel prices.

Pencilaria A WONDERFUL FODDER PLANT. A new fodder plant of untold value to the farmer for its immense growth of hay; for its excellent fodder; for its quick growing foliage. It is a native of Central America. If cut as soon as it reaches the height of 2 or 3 feet can be mowed from four to six times, according to the latitude. If allowed to grow 12 or 18 feet high and cut when the flower heads begin to develop it will yield the heaviest fodder crop per acre of any plant now in cultivation. For feeding it is equal to any fodder, and is relished by any kind of stock, either dry or green.

Enormous Grower It should be planted 6 inches apart in the row and the rows about 3 1/2 feet apart. Cultivate two or three times if possible, and by that time the sight will astonish the beholder, and you will marvel at its luxuriance, and your wonder will but then begin. It will average 40 rich, juicy, leafy stalks to the plant. Sow as early as you would Indian Corn. The usual way of growing it, however, is to mow when 3 to 6 feet high, and it will immediately start again and can be mowed 4 to 6 times during the season. Every farmer, everyone who keeps cows, horses and hogs, should try it. Sow in drills 5 to 6 pounds, or broadcast 8 pounds per acre.

PRICE: Lb., 50c; 3 lbs., \$1.25; postpaid. See enclosed pink price list for quantity prices.



PENCILARIA



Feterita.



Sudan Grass

HAS EVERY OTHER FORAGE PLANT BACKED OFF THE TRACK.

Sudan Grass is the wonder of the age. It is the greatest forage plant ever introduced by the United States Department of Agriculture. It seems to have taken the country by storm.

The Origin of the Seed

In the year of 1909 a small amount of this seed was brought into this country from Sudan, Egypt, by the United States Department of Agriculture. It has been thoroughly tested since its introduction, in many sections of the United States, everywhere a success.

Extract from United States Department of Agriculture, Bureau of Plant Industry's Bulletin:

"Sudan is probably the wild original form of the cultivated sorghums. It is a tall, annual grass, growing under favorable conditions to a height of 6 to 10 feet, but when broadcasted thickly, it grows only 4 to 6 feet high. The stems are fine, the largest stalks seldom larger than a lead pencil. Where the plants are scattered, they stool abundantly, as many as 100 to 150 stalks coming from a single root. In general appearance, Sudan Grass is very much like Johnson Grass, but they are entirely distinct, for Sudan Grass lacks root stalks and, therefore, never becomes troublesome as a weed. The stems are leafy, erect, and seldom lodging. The grass cures easily, making hay of excellent quality, which is readily eaten by all kinds of live stock. It has been grown with marked success throughout the semi-arid regions, maturing seed even in South Dakota. It grows well through the humid regions, and from Central Missouri southward will ordinarily yield two and three cuttings of hay in a season. It is considerably earlier than the earliest Amber Sorghum and will mature as far north as the Canadian line."

Growing the Crop

It may be grown either drilled, in cultivated rows, or broadcasted. If planted in cultivated rows, the rows should be as close as possible, and yet permit of easy cultivation. In 24 to 30-inch rows, 2 to 3 pounds of seed per acre is ample; and, under conditions of very low rainfall, this method is recommended. Under humid conditions, 18-inch rows are preferable, and 5 pounds of seed per acre are sufficient. For drilling or broadcasting, 15 pounds of seed per acre should be used. The seed should not be sown until the ground is warm; that is, about the time for planting corn. The young plants will withstand slight frosts without injury.

Harvesting the Crop

The hay should be cut as soon as the grass is fully headed, and early cutting is especially advisable where two or more cuttings per season are expected. The grass can be cut with a mower, but more conveniently with a binder, especially in dry regions, as the hay cures very readily in bundles.

Saving the Seed

The grass yields a heavy crop of seed, especially in cultivated rows. If the seed is grown for commercial purposes, it is highly important that it be grown on land not infested with Johnson Grass, as the seeds of the two are distinguishable only with difficulty. It is recommended that, in growing for seed only, it be cultivated in rows, taking great care to hoe out and eliminate any Johnson Grass or other weeds, etc., that may show in the Sudan Grass. It crosses very readily with all the cultivated varieties of Sorghum, and when it is grown near any such variety more or less numerous hybrid plants will appear in the progeny. These hybrids do not harm in fields intended for hay, but where a crop is to be harvested for seed the hybrid plants should be rogued out. This should be done preferably as soon as the hybrids appear in bloom, so as to prevent further crossing in the field, but in any event it should be done before the Sudan Grass is harvested. The Sudan Seed weighs about 32 pounds to the bushel."

Sudan Grass

WITHOUT DOUBT HAS SOLVED THE HAY QUESTION. THE GREATEST DROUGHT RESISTANT CROP EVER KNOWN. At the same time it does not blight where the moisture is heavy, and under good seasonal conditions it yields a larger tonnage of hay per acre than any other crop known. It recovers rapidly after cutting and the next crop is usually ready for harvest within thirty days from the first cutting. Sudan Grass has solved the hay question wherever grown. Farmers are looking for a crop with both a feeding value and a market value. This country has never produced enough hay. Good hay always brings splendid returns. Hay is the best forage and the most convenient to handle. Sudan Grass is a great producing crop, both in quality and yield, makes a nutritious and palatable hay which is greatly relished by cattle, horses and other farm stock. In feeding value the hay is second to Alfalfa and far better than Millet, which is usually sown as a catch crop. Its yield is also much larger than Millet.

Sudan Grass has everything in the way of forage crop we have ever seen backed clear off the boards.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

Successful and Valuable Money Making and Money Saving Crops

Money Saving Crops

The crops on the farm may be divided into two classes, the money making and the money saving crops. The real need of the farmer is not only the money making crops, but the money saving crops. The vital proposition is the production of those crops that will make and save the most money and give the best and most profitable returns, whether it saves or makes you money. A dollar saved by planting money saving crops is like the old saying, "One bird in the hand is worth two in the bush."

The United States Department of Agriculture states that in 1913, when conditions were unusually severe, the following hay yields per acre were recorded:

Eastern South Dakota and Southern Minnesota, 4½ to 5 tons. Maryland and Virginia, 2 to 3½ tons.

Eastern Colorado and Northern Texas, 1½ to 2½ tons. Ten-

nessee and Mississippi, 2 to 5½ tons, etc.

These yields were made without irrigation. When irrigated the crops were from 8 to 9 tons and over per acre. The yield of seed on dry land from 500 to 1,000 pounds, but on irrigated land as much as 2,550 pounds have been grown per acre. Sudan Grass crosses quite easily with other cultivated sorghums and Johnson Grass, but our seed has been grown in the North, where no Johnson Grass is grown, and our fields have been kept far apart from any other sorghums. We can assure our customers, therefore, of the high quality of our Sudan Seed.

We are now cutting three tons and over of excellent hay to the acre from seed planted the first of June, which had not more than 2 inches of rain all told. It is six feet high and is as fine as one could wish for.

A. M. AUGUSTINE,
Secretary Illinois State Horticultural Society.

Successful Annual Forage Plants

Teosinte "This plant affords opportunity for one to make millions of blades of grass grow where none of any account grew before." This is what Prof. Asa Gray said of Teosinte. The plant comes to us from the fertile plains of the Nile, where travelers tell us the enormous yields of 300 tons of green fodder per acre is not uncommon. Here in America, too, its yields have been marvelous. It has always given the heaviest yields of any of the forage crops grown. It is a remarkably vigorous grower, reaching 12 to 18 feet in height, with an unusual supply of leaves and tender stems. Quite often a single kernel will produce as much as 60 to 100 stalks. If cut when it reaches 4 to 5 feet it makes excellent fodder and will produce a second crop fully as large as the first. The stalks contain from 8 to 10 per cent of sugar.

CULTURE OF TEOSINTE: Plant in hills four to five feet apart each way about corn planting time, and cultivate like corn. It will soon look like a dense forest. Makes a magnificent fodder for cattle during the winter months. Give it a trial. It will more than pay you; grow it for your cattle and hogs. You will be surprised what a tremendous amount of fodder you will get off an acre.

PRICE: Large packet, 10c; ¼ lb., 50c; lb., \$1.50; 5 lbs. or more, \$1.25 per lb.; postpaid.



Jerusalem Corn This non-saccharine sorghum is one of the best and surest grain crops for dry countries and seasons. It grows about 3 feet high and makes one large main head and several smaller ones. The grain is pure white and a good food for man or beast. Use 8 pounds of seed per acre.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid.
See enclosed pink price list for bulk prices.



Teosinte.

Yellow Milo Maize A non-saccharine sorghum of high value; cultivated like corn. It is a vigorous grower; of deep green color, attaining a height of 8 or 10 feet. Some stalks develop 20 heads. The seed is fed to horses, cattle, chickens, etc. It will mature its main head in 100 days and will continue growing until frost. Plant six to eight pounds per acre.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.
See enclosed pink price list for bulk prices.

Kaffir Corn Is a most excellent fodder plant. It grows from 6 to 8 feet high, making a straight upright growth. The stem or stalk bears numerous wide leaves. The stalks keep green and are brittle and juicy, making excellent fodder, either green or dried. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. There is no fallow about this, as it possesses the quality that all the tribe possesses of going without rain without any loss of capacity or yield. The grain is extremely valuable for poultry. Cultivated the same as corn, requiring 7 pounds of seed per acre. For fodder sow one-half to one bushel either broadcast or in drills.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.
See enclosed pink price list for bulk prices.



Jerusalem Corn.

Sorghum—(Cane) EXTRA EARLY SORGHUMS, THE SWEETEST, THE LEAF-EST, THE HEAVIEST YIELDING.

The possibilities of Earliest Cane are almost beyond comprehension. Growing it for ensilage has become an established part of American agriculture and stock raising. It is one of the very few types that meet the highest expectations.

To the utmost vigilance and mature deliberation of practical farmers in the selecting of the most prolific types can be attributed the great popularity of Sorghum, as experience has demonstrated to a mathematical certainty that it is vastly superior to any other.

It can be grown to perfection everywhere. In Texas and Manitoba, in Maine and California. There is nothing so good in the Sweet Sorghum line as Cane for quick fodder. Sheep relish it, hogs grow fat on it, cattle glory in it, horses will jump a wire fence to get into it, chickens, and, in fact, everything living on the farm is fond of it.

For soiling and green feeding Cane is of a very high value, especially during the summer and autumn when the pastures are dry and it is hard to find sufficient fodder to keep the animals in a thrifty condition. It is one of the best foods that can be used to feed growing animals and also the dairy cattle, on account of the flow of excellent milk which it will produce. An acre of Cane often produces as much as 40 tons of green fodder, but the average yield is probably only 20 tons.

Cane makes a grand summer pasture for all kinds of stock, especially for sheep and hogs, when used before it heads out. The hay is very nutritious and is relished by all kinds of stock, including hogs. The yield of cured hay is about 12 to 15 tons per acre. Cut when heading out, leave for two or three days on the ground and then put up in shocks. The Silage made of Cane is exceptionally nutritious. It is best cut for silage when the seeds begin to harden, as if cut in to immature condition, it is liable to become sour. Cow Peas and Soy Beans are quite often mixed with Cane for the silo. This will greatly increase the feeding value. As a catch crop Cane is frequently used. It can be sown in midsummer after an early grain crop or can be planted in place of other crops if they have been destroyed by hail, flood or insects.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bulk prices.



Kaffir Corn.



Earliest Amber Corn.

Orange Sorghum (Cane)

Two or three weeks later than Earliest Cane, growing taller, producing heavier stalks and more abundant leaves. It is always in big demand.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

"Billion Dollar Grass"

ESPECIALLY VALUABLE FOR SILO AND FOR FEEDING GREEN—BETTER THAN THE BEST CORN FODDER.

From Japan, that mysterious country, which is furnishing (and has furnished in the past) many rare farm seeds, comes this remarkable grass—remarkable in a hundred different ways, for there is nothing known to man today that is more luxuriant, more prolific, more marvelously rich and vigorous in growth than Billion Dollar Grass. It will produce a hay crop in from six to ten weeks, anywhere, and if sown the first of May it will be ready to cut the middle of July for hay, attaining the height of (according to the richness of the soil and warmth) from 5 to 7½ feet. It is pre-eminently the grass to sow if you are going to be short on hay for your horses, mules, cattle and other stock.

BETTER THAN CORN FOR SILO—

Cows with both Billion Dollar Grass and Corn before them will take Billion Dollar Grass first and consume it without waste; when put upon Billion Dollar Grass they increase in milk and fall off when feed is changed to corn. An ideal ensilage mixture is made of two parts Billion Dollar Grass and one part of Soy Beans or Cow Peas, mixed when filling the silo. This mixture forms a complete balance ration for milch cows without grain, oil cake, etc.

CULTURE—Everybody reading the above regarding this wonderful grass will wish to know its best method of cultivation. If you wish very fine, leafy hay, and have strong, rich ground, sow at the rate of 20 pounds per acre, but if your soil is but moderately rich, then sow at the rate of fifteen pounds per acre. This latter is the amount we ourselves sow, and find same very satisfactory. It can be sown at different times of the year, especially if you wish same for pasturage, or if you are short of hay. It can be sown in April, in May, in June, in July, and even in August, and will return glorious, heavy crops.

FEEDING VALUE—Here is where Billion Dollar Grass comes into play. Professor Williams, of the United States Department of Agriculture, says: "Already widely grown as a hay crop, it deserves more general use for silaging, as this grass is of particular value for feeding to dairy cattle, young stock and sheep."



Billion Dollar Grass.

Scotts, Ark., July 2, 1919.

Jefferson Seed Co.,

Jefferson, Iowa.

Dear Sirs: I am enclosing a picture of the Billion Dollar Grass grown on my farm from the seed I ordered from you last Spring. I am well pleased with it and advise others to try it.

Sincerely yours patron,

CHARLES L. LITTON.

FOR FEEDING GREEN—All rich, luxuriant growing grasses and forage plants must be fed in the green state moderately at first. Billion Dollar Grass is one of those rich, magnificently luxuriant growing grasses; therefore you should turn in hogs and cattle and sheep and horses at first moderately, after they have had a good feed somewhere else, and then gradually accustom them to this. It is on the same plan as hungry stock turned into rich clover; they would find harm. Turn them in at first moderately, and you can soon keep them in permanently.

FOR SEED—Let Billion Dollar Grass get thoroughly ripe; cut and thresh as you would timothy. The seed is rich and nutritious. Poultry, geese and turkeys all relish Billion Dollar Grass in the green state, and keep healthy and fresh on the seed thereof when fed during the fall and winter months.

Hogs and their families. The hogs grun and give that contented swag of the tail when they can pasture on Billion Dollar Grass, and then if you wish to fatten them, give them rations of the seed. Remember, this grass will produce from 40 to 60 bushels of seed per acre. This feed, either ground or coarse, makes excellent food, although it is inclined to be slightly laxative.

Cows, calves and other stock look with pleasure on the Billion Dollar Grass pasture and feed in contentment upon its luxuriant swath and glory in Billion Dollar Grass hay or grain. Try it this season to make hay out of it, fill your silos therewith and watch the cattle eat it.

Horses, mules and the like jump over a four-foot fence to get at the Billion Dollar Grass, and they will fatten and keep healthy thereon. They will eat the hay as eagerly as cattle.

A REMARKABLE GROWER—It is truly the most marvelous grower, the most luxuriant stooler that we have ever seen. Imagine a field sown to Billion Dollar Grass, with every spear of it over 6 feet tall, yielding from 26,000 to 50,000 pounds of as rich green fodder as the world has ever seen. Men talk about hard times, but positively hard times must vanish on every farm where Billion Dollar Grass is sown. You can get two or three rich crops from the same annually, and then a big lot of fodder besides. If you sow early you will get from 26,000 to 50,000 pounds of fodder, which you can put in your silo or cure for hay. Billion Dollar Grass will quickly spring up again and give you another yield that will astonish the country. This can be cut again for hay; then the field will give you a pasturage all fall, and horses and hogs and sheep and cattle and poultry will eat it greedily.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid.
See enclosed pink price list for bulk prices.

Billion Dollar Grass.

Sow Dependable "Jefferson Brand" Grass Seed





Dwarf Essex Rape

THE MOST PROFITABLE PASTURE PLANT IN EXISTENCE.

RING THE BELLS; stand aside and make room on every farm for a few acres of Dwarf Essex Rape, the most profitable pasture crop or plant in existence. Yes, come here, Mr. Farmer, until we tell you about it.

ONE ACRE of Dwarf Essex Rape will pasture more hogs, cattle and sheep than six acres of grass or clover. As a healthy, fattening pasture food it has no equal. It stands without a rival in cheapness and effectiveness.

It is an annual, bearing a close resemblance in leaf and stalk to the Rutabaga, but both leaves and stalk are more numerous in the Rape plant, and of a taller habit of growth. It is a pasture plant which may be eaten off by any kind of live stock, but it is pre-eminently fitted to furnish pasture for sheep, cattle and swine.

A good crop will furnish at least 12 tons of green food, and its nutritive value is twice that of clover an acre. One acre of well-grown Rape will furnish pasture for twenty head of sheep for two months, and will fatten them in good form for market. Dwarf Essex Rape thrives best on good soil, rich in vegetable matter. Slough lands are excellent. This plant may be grown successfully in the following ways, viz.: 1. In the early spring to provide pasture. 2. In June or July, on well-prepared land to provide pasture. 3. Along with grain, using 5 pounds of seed an acre, to provide pasture for sheep after harvest. 4. Along with peas, oats, clover seed, to provide pasture to get a "catch" of clover. 6. As a cover.

PRICE: Lb., 35c; 5 lbs. (enough for 1 acre), \$1.50; postpaid.

See enclosed pink price list for bulk prices.

Shallu A NON-SACCHARINE SORGHUM FROM INDIA. Producing very large yields of both grain and fodder on account of its stooling habit; 3 to 6 stalks are produced from a single grain. The stalks do not harden, as do other fodder crops, but keep green, brittle and juicy. A most excellent fodder, either green or dry, being highly relished by all stock. It forms a large head, similar to broom corn, with round, plump, white seeds, and has proven an

excellent feed for horses, cattle and chickens. It makes an excellent flour for pancakes. Does well everywhere. Should be sown in rows 3 feet apart, 3 to 5 pounds to the acre. For fodder sow 25 to 50 pounds, either broadcast or in drills.

PRICE: Lb., 35c; 3 lbs., \$1.00; postpaid.

See enclosed pink price list for bulk prices.

Golden Millet (True Southern Grown Seed.) In the North, Millet is sown almost altogether for hay, and for that purpose Southern grown seed is best. It grows taller than that from Northern seed, and that means more hay. It is finer than that from Northern seed, and that means better hay. In fact, from the standpoint of profit, a farmer had better pay \$5.00 a bushel for the true Southern grown Golden Millet than to sow the best Northern Millet as a gift. Millet seed produced in the North, even from Southern seed, becomes what we call Common Millet. Not only does the plant change in character, becoming coarser and much more dwarf, but the seed itself shows a change, and is readily distinguished by those experienced in handling it. We wish to say that any Millet seed offered and shipped by us as Southern Grown Seed can be relied upon to be genuine stock, true to name. About three-fourths of a bushel of seed is sown. It is tender if cut when it is in full bloom. A yield of five tons per acre is nothing unusual.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.

See enclosed pink price list for bulk prices.

Northern Grown Golden Millet This grows very rank and is one of the best varieties for hay or fodder. On good, rich soil it will make a growth of 4 to 5 feet high, and although the hay may seem coarse, yet it is so tender that if cut at the right stage, which is when in full bloom, even the hogs will eat the cured hay quite greedily. A good yield is from 3 to 5 tons of hay to the acre. Sow three pecks per acre.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.

See enclosed pink price list for bulk prices.

Siberian Millet A fine variety from Russia, earlier than either Golden Millet or Hungarian, and consequently very valuable for the North and yields remarkably. It is extremely hardy, withstanding drought wonderfully, and is about two weeks earlier than the Golden Millet. The plant stool to as many as thirty to forty stalks from one seed, and is not subject to rust.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid.

See enclosed pink price list for bulk prices.

Japanese Millet Was first grown in this country by Professor Brooks, of the Massachusetts Agricultural College, who brought it from Japan. It has proven very valuable and is highly recommended for the reasons: It will grow 6 to 8 feet in height and yield 15 to 25 tons per acre. It may be siloed, fed green or cured into hay, and its feeding quality is always superior to fodder corn. It can be sown at any time from the middle of May to the end of July, either broadcast at the rate of 15 pounds per acre, or in drills, using 10 pounds of seed per acre. The seed so far has been scarce and high priced, but we can offer it at a lower price than usual.

PRICE: Lb., 25c; 3 lbs., 60c; postpaid. See enclosed pink price list for bulk prices.

Broom Corn **ONE OF THE BIGGEST MONEY-PAYING CROPS IN THE WORLD.** In the Northern states the tall varieties do best, while in more Southern states, the dwarf kinds are mostly grown. Our Wisconsin Evergreen has produced over a ton of brush per acre; the Dwarf Evergreen is only little less productive, the market prices of the brush varies greatly according to the crop, from \$80.00 to \$100.00 a ton having been paid in the last years. Broom Corn can be grown where corn grows and requires the same treatment. It should be planted later, however, when the ground is quite warm. Only 70 to 80 days are needed to produce a crop. Plant in drills 3 to 3 1/2 feet apart, the plants 2 to 3 inches apart in the rows according to height. Ten pounds of seed are sown per acre.

Improved Evergreen For length, strength and straightness of brush this variety is unexcelled. It is of light green color, without the slightest reddish tinge. It makes the best of any variety grown. Height, 7 to 8 feet.

PRICE: Lb., 25c; 3 lbs., 65c; postpaid. See enclosed pink price list for bulk prices.

Dwarf Evergreen This is a popular variety on account of not being so liable to blow down as the taller varieties. Heads make a fine yield.

PRICE: Lb., 25c; 3 lbs., 65c; postpaid. See enclosed pink price list for bulk prices.

Formerly Jefferson-Ratekin Seed Co.



Golden Millet.
Northern Grown.



Golden Millet.
Southern Grown.



Russian Sunflower, 14 Inches In Diameter.

Cotton Seed

**Tried and Tested—Varieties:
The World's Best**

Doubling the yield per acre costs no more.

Brown's No. 1 Cotton Seed

Among all that is good we believe there is no variety of cotton in existence that surpasses or equals **Brown's No. 1 Cotton**. We have hundreds of testimonials from responsible cotton growers who say without stint or reservation, **Brown's No. 1 Cotton** is not only one of the best, but **THE BEST, HIGH-CLASSED VARIETY IN EXISTENCE**, superior both in yield and quality to other sorts. This is an extra large boll cotton and yields 42 to 45 per cent and has a record of 50 per cent. It has extra long tap roots, greatly assisting it to resist drought—and in all its history has never shown any sign of rust or wilt: **TWO BALES PER ACRE CAN AND HAS BEEN MADE** with ordinary cultivation and fertilizer. You have only to **TRY IT** to prove that you have success within your reach.

PRICE: Lb., 35c; 3 lbs., 90c; postpaid.

See enclosed pink price list for bulk prices.

Long Staple After handling this splendid variety for the past three years, through all kinds of seasons, wet and dry, we come before our customers and the cotton growers in general, with the confidential assurance that there is no better variety grown anywhere, or that will produce a more certain, sure and profitable crop than this grand variety. It is grown extensively and very generally along the Red River Valley all the way from the headwaters of that river, Texas and Oklahoma, to its mouth into the Mississippi river in lower Louisiana, and all our reports—and they are extensive—throughout Arkansas, Oklahoma, Texas, Louisiana, Mississippi, Tennessee, Alabama and Georgia, they everywhere extol it highly as being one of the very best, sure, certain and prolific they have ever tried or tested. The bolls are very long and usually have four or five locks. The lint runs about 1½ inches long, and is of excellent quality. This cotton has sold for 20c to 25c per pound when markets were normal. This seed is grown for us in North Texas by one of the best and most scientific cotton growers of that section, and we have contracted for a specific amount of his most select seed. In order to obtain a supply we would recommend and urge you to order at the earliest period when you can determine on what you want.

PRICE: Lb., 35c; 3 lbs., 90c; postpaid.

See enclosed pink price list for bulk prices.

Texas Triumph This is another great Cotton. Another we have been handling for the last three years. Another that has achieved great laurels and earnest commendation, by every one that has grown crops from our seed of it. It's known as the new 16 to 1, but was first introduced seven years ago by a Mr. Mebane, of Caldwell County, Texas, and is known in many places where grown as the Mebane Cotton; in other places Mebane Triumph, and plain Triumph, but it makes no difference by which name it is called, just so you get the genuine variety and article which we are listing

Mammoth Russian Sunflower

There is hardly a farm anywhere but what an acre or so goes begging for want of a crop. Sunflower offers exceptional opportunity to the thrifty. There is absolutely no waste of the crop. Every portion can be utilized. The flowers make a beautiful garden display, hide unsightly buildings and corners. The seed is eagerly eaten by fowls, and they fatten thereon and lay more eggs than on any other food. It is relished by horses and hogs. Plant in hills 3½ to 4 feet apart each way, or in drills one seed every foot apart in the row. Two to three pounds will plant an acre. The plants will grow from 6 to 10 feet high and will be literally covered with large heads well filled with seed. In feeding to both poultry and hogs that is necessary is to allow them to help themselves.

PRICE: Lb., 35c; 3 lbs., 90c; postpaid. See enclosed pink price list for bulk prices.

Flax

MINNESOTA NO. 25 OR PRIMROSE FLAX—A pure-bred variety from the Minnesota Experiment Station, very much superior to common. It is earlier than common flax, a strong resister of the elements, insects and troubles that the Flax plants is addicted to. Our stock is very pure, free from weeds. North Dakota grown; and the best that can be obtained.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for bulk prices.

New Russian Flax

This seed came from Russia, the home of tremendous flax yields, the land of strong, hardy, vigorous varieties of flax, the place where flax produces all the way from 40 to 75 per cent more per acre than here in America. One seed has been grown in this country. It is thoroughly acclimated and is ready to show you what it can do. Our New Russian Flax is immense. It outyields any other variety known so far; it is very early, of vigorous growth, drought and insect proof. It is singularly free from disease and shows its Russian vigor from the start.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for bulk prices.



among the top-notchers, where it has won its way and where it belongs. Among the best at the time of its introduction, it has been carefully rogued and in every way improved upon each and every year, and still maintains its position at the head of the heap. Few cottons, under the same conditions, make as large a yield of Seed Cotton as the Triumph, and it surpasses every known variety in lint turnout. It produces a strong, thrifty, deep-rooted stalk, with long limbs and short joints. The bolls are large and begin to form near the ground close to the stalk. It is the earliest big boll cotton and stays in well after opening. If planted with the early, small boll cotton, it blooms and fruits at the same time, with the only exception that it takes the large bolls a few days longer to open. When picked free of dirt and water the lint turned out is from 38 to 41 per cent, and in many instances as high as 42 per cent. Last season our grower of this seed reported that his crop averaged a 500-pound bale to every 1,250 pounds of cotton seed throughout the season. **OUR TEXAS TRIUMPH** or Mebane Cotton Seed, which has been carefully culled, is strictly pure. Our growers buy fresh seed each and every year from the originator and are the only growers we have knowledge of that do. If you are interested and want the best pure seed of this variety, don't fail to send for some of this select stock.

PRICE: Lb., 35c; 3 lbs., 90c; postpaid.

See enclosed pink price list for bulk prices.

Plant Dependable "Jefferson Brand" Seeds

SEED INOCULATION

INSURES A STAND—ENRICHES THE SOIL—INSURES SUCCESS WITH LEGUMES

THE VALUE OF INOCULATION

Nitrogen is the most important of the various chemicals which constitute the food of all plants. The air is three-fourths nitrogen, but unfortunately plants cannot take up nitrogen. It must first be converted into a form in which the plants can use it. Wheat, corn, timothy, etc., cannot take nitrogen from the air, but must take it solely from the soil, thus exhausting the soil, in time, unless nitrogen is kept supplied to the soil. This can be done by the use of manure or by commercial fertilizer which carries nitrogen (ammonia). Unfortunately the average farm does not produce sufficient manure. Commercial fertilizers are rapidly increasing in price, and the available supply is now far short of the demand. In the eastern and southern part of the United States, the farmers were long ago driven to artificial fertilization. In the great West, where the soil was deeper, and settlement later, fertilization was not heretofore so necessary. But the western farmers are now realizing that their soils are not inexhaustible. Some are already depleted of nitrogen, and all western soils will sooner or later reach the same condition as the soil of the east and south.

Fortunately there is a class of plants which form nodules on their roots. These plants are called legumes and include all the clovers, alfalfa, beans, peas, vetch, etc.

These nodules are simply masses of living germs, or bacteria, which take nitrogen from the air and convert it into a form available for plant use. In fact, the bacteria in these nodules not only supply the plant with all the nitrogen it can use, but takes up far more, the excess going into the soil for the benefit of future generations of crops.

Without nodules no nitrogen can be taken from the air. Without nodules legumes take their nitrogen from the soil thus exhausting it just the same as wheat or corn, their greater fertilizing value being

due only to their larger root system which furnish considerable humus as it decays. And the benefit does not lie alone in the fertilization of the land itself. As these bacteria, in the nodules, supply the plant with sufficient nitrogen for its growth, the yields increase, the legume grows faster, matures earlier, takes on a greener color, and is of higher feeding value as it is higher in protein.

How then can a farmer be sure of nodules developing on the roots of a legume crop? There is but one answer, INOCULATE. Inoculation is simply the placing of germs on the seed, before sowing. These germs will rapidly develop into colonies and form nodules. It is true that some soils contain sufficient bacteria, especially in some parts of the country, to inoculate a crop. Other soils do not. Some years ago red clover succeeded all over the central states without inoculation. But the red clover bacteria, from the souring of the land and other causes, has been exhausted on most soils. Today, red clover does not succeed in the central or eastern states without inoculation except in a few especially favored sections. As for alfalfa and sweet clover it is now practically impossible to get a stand in the east without inoculation. And what is now true in the east is becoming true in the west, in fact is already true in many parts of the west. As for beans, peas, vetch and other legumes they may succeed fairly well without inoculation but will succeed better when inoculated and will furnish far more nitrogen to the soil from their nodules than they can possibly furnish from the decay of the roots alone.

The expense of inoculation is so small, the trouble so little, that no farmer, either east or west, should take a chance on losing a crop for want of inoculation.

Inoculate the seed of all legumes, make inoculation certain, don't trust to chance—play safe.



Inoculated.

Not Inoculated.

THE COST IS LOW

OUR STANDARD INOCULATING BACTERIA sells at 75 cents per acre. A one "acre" bottle will inoculate 15 pounds of alfalfa, clover or other small seeds, or 1½ bushels of beans or peas. The price has been made low to place it in the hands of every farmer of the land. The quality is positively of the best; no better bacteria can be made at any price. A higher grade product is impossible; everything has been done that modern science knows how to do to produce the most germs of the highest virility. The low price has simply been made possible by the immense sales of this product—large sales and smaller profits—this is the principle behind nearly every firm that has made a national success. In fact this is the principle that is sending standard inoculating bacteria into all the countries of the world.

THE EXPERIMENT STATIONS ADVISE INOCULATION.

SOUTH CAROLINA says (Bul 53): "Inoculation is not a cure-all, but its proper use will send the farmer further forward in three years than has been possible for him to go without it in a generation."

ALABAMA says (Bul 87), that "inoculation increased crimson clover 146%, field peas 138%, vetch 89%."

NEW JERSEY says (Bul. 229), that "inoculation increased the yield of alfalfa 500%, lima beans and cow peas 100%, beans 75%."

THE FARMERS' BULLETIN says (Bul. 315): "Legumes reach their maximum value as green manures only when abundantly supplied with nodules."

In Bulletin No. 315 issued by the United States Department of Agriculture inoculation is highly recommended. Among other things this bulletin says "the peculiar value of legumes for maintaining and increasing the fertility of soils is due to certain bacteria which develop nodules upon the roots of leguminous plants and which have the unique power of rendering the free nitrogen of the atmosphere available for plant growth. Without these bacteria, legumes, like other crops, exhaust the soil of its combined nitrogen."

HOW APPLIED.

This bacteria is applied direct to the seed, before sowing, which puts it right on the incipient root of the plant.

Why use the laborious method of hauling ground from another field, scattering it broadcast, and then trusting to luck for some of it to come in contact with the roots of the new plants? Why take a chance of importing plant diseases and weed pests in soils from other fields? Use the scientific method—the safe method.

PRICE.

Garden size	\$0.50
2 Acre size75
4 Acre size	1.40
6 Acre size	2.25
8 Acre size	3.50

Postpaid on receipt of price.

Formerly Jefferson-Ratekin Seed Co.

"Jefferson Brand" Grass and Clover Seed

A Few Plain Facts About Grades and Quality of Grass and Clover Seeds The terms so often used by various seedsmen by which different grades of grass seeds are designated, such as "Fancy," "Prime," "Choice," etc., are not only misleading, but confusing to the ordinary farmer who wants the best seed there is to be had or grown, and which, by the way, are always cheapest in the end. We have before called attention to the fact that we handled only one grade of Grass and Clover Seed—the best grade and quality that can be grown. This being so, we cannot compete in price with cheap, low grades and quality of seed advertised under these confusing and misleading names and in order to protect ourselves, our customers and the good name of our highest and best grade of pure, clean seeds, we have adopted a trade name, or insignia, "JEFFERSON BRAND," to designate them from lower grades of seeds which we will hereafter handle only to compete in price with the same grades of seeds listed by other seedsmen. We will list nothing in our catalog and printed matter except "JEFFERSON BRAND" Seeds, but will quote lower grades upon request.



ASK FOR
JEFFERSON BRAND
REMEMBER THE NAME

LEARN THE
MARK OF QUALITY
REMEMBER THE NAME



"JEFFERSON BRAND" IOWA GROWN TIMOTHY SEED.
For Price, See Pink Price List.

You Run No Risk When you purchase our "JEFFERSON BRAND" Clover and Grass Seeds, for if not satisfactory upon receipt and examination, you may return them and money will be refunded. You can also test them yourself if you desire. Of course we do not guarantee them to always produce a perfect crop, as we have no control over the manner of sowing or weather conditions, but we do our best to have everything first class.

Few persons detect impurities in Clover or Grass Seeds unless the seed is very foul. Frequently our farmer friends have watched the recleaning of Timothy or Clover Seed by our machines and noting the impurities taken out, have wondered where they came from, as the seed seemed apparently without dirt or trash before cleaning. Other seed dealers who have happened to be in our warehouse when we were cleaning clover have often remarked that the seed looked so extra nice they should not reclean it. From those same lots of seed we were cleaning out from three to five pounds of light seed, sand and trash per bushel. This makes quite a difference in real value, especially with the present high prices and easily makes our seed worth one or two dollars per bushel more than that obtained from many other dealers.

Read Carefully

THE PRICES OF ALL GRASS AND CLOVER SEEDS ARE CONSTANTLY CHANGING AND SUBJECT TO MARKET FLUCTUATIONS, AND IT IS ALWAYS BEST TO WRITE FOR LATEST AND LOWEST QUOTATIONS. BUT TO CUSTOMERS AT A DISTANCE, WHO CANNOT LOSE THE TIME REQUIRED TO DO THIS, WILL SAY, IF PRICES ARE LOWER, THEY WILL GET THE FULL BENEFIT. IF HIGHER, WE WILL SHIP ALL THE MONEY SENT WILL PAY FOR. For prices, see Price List enclosed.

Sow Dependable "Jefferson Brand" Timothy Seed

"Jefferson Brand"---Our Famous Clovers



Medium Red Clover

We sell more clover seed direct to farmers than any seed firm in the West, and it is sold because farmers get a better quality of seed—brighter, cleaner, more plump and vital—than they can secure elsewhere. The reason is that we take special care to have everything first class and protect our customers by using the microscope in both buying and selling.

Our clover seed has become widely known for its purity, strong vitality, hardness, vigorous and healthy growth, and stooing qualities, so that now we receive many orders from the most distant parts of the United States. Well-posted farmers appreciate the difference between it and ordinary stock. This is the most important of all clovers and the standard everywhere for hay and pasture and our grade is the plumpest, cleanest, purest, fanciest grade; tested and of high vitality. Farmers usually sow 15 pounds of clover seed to the acre when sown alone, but this seed is so choice that 6 or 7 pounds are really sufficient if conditions are favorable, but we recommend sowing 10 pounds so as to be sure of a perfect stand. About 3 pounds, if sown with timothy.

Medium Red Clover

This is regarded as the most valuable of the Clover family. It is sometimes called June Clover and is a dependable all-round variety for farmers and stockmen. It makes two crops each year. The first is usually cut when it is in blossom for hay; the last crop may be harvested for seed, cut for hay, or plowed under to add fertility to the soil. It may be sown either in the spring or fall, and where no other grasses are used, at the rate of 10 to 12 pounds to the acre, according to quality of seed used and condition of the soil. Clover adds greatly to the fertility of the land on which it is grown. It does not exhaust the soil, but enriches it. It pays always to buy the best quality of Clover seed which can be obtained. Even though the first cost is twice as much as cheaper seed, it will be found in the long run that inferior seed is the most expensive, not only on account of less hay or seed being produced from it, but from the fact that one's land becomes infested with weed seeds which decrease the value of the land on which they are growing.

It has been demonstrated time after time that crops following a growth of Clover are larger and of better quality than when grown on land which has produced the same crop for a series of years. Clover should be rotated with grain crops every three to five years. The small nodules or bacteria which cling to the rootlets possess the power to draw the nitrogen from the air and store it in the soil where it is most needed and where it can be drawn upon by subsequent crops. It is well to sow Clover with every crop of hay. It serves to keep the ground free from weeds, restores fertility, and may be pastured in the fall, or will repay the grower even if put to no other use than to be plowed under as a green fertilizer.

PRICE: Lb., 75c; 3 lbs., \$2.00; postpaid. For peck and bushel prices see enclosed pink price list.

Mammoth Red

This is also called Sapling or Pea Vine Clover. It greatly resembles the Medium Red, but grows coarser and more vigorous. It is the best clover for pasturage, as it will produce an enormous yield and is of the highest feeding quality, but not as desirable for hay. Specially desirable for hog pasture. You can enrich your soil more cheaply by sowing Mammoth Clover and plowing it under than in any other way.

PRICE: Lb., 75c; 3 lbs., \$2.00; postpaid. For peck and bushel prices see enclosed pink price list.

Alsike Clover

This is one of the hardest varieties known. It is a perennial and does not winter kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. When sown with other grasses it forms a thick undergrowth and greatly increases the yield. It is frequently sown with both Medium Red Clover and Timothy and the quality of hay thus produced is excellent. It is especially valuable for growing on wet or swamp land. If you have a piece of land that is too damp for Alfalfa, other clovers or grass, sow a mixture of about four pounds of Alsike Clover and ten pounds of Red Top Grass Seed. This will make an excellent crop of hay.

PRICE: Lb., 60c; 3 lbs., \$1.60; postpaid. See enclosed pink price list for peck and bushel prices.

Crimson Clover

This fine Clover is one of the most valuable fall crops the farmer can put in, as it will make the earliest green feed of any of the Clovers. It will yield under favorable conditions 8 to 10 tons of green feed per acre or 1½ to 2½ tons of hay, and is worth as a fertilizing crop \$20.00 to \$25.00 per acre. It can be cut or turned under in time for other early spring crops, and in warm climates four or five cuttings are made during the season. Crimson Clover can be sown any time from July to October. The seed we offer is Northern grown, on new land and the best and cleanest that can be produced, showing a strong germination and 98 per cent purity. Sow 10 to 15 pounds of seed per acre.

PRICE: Lb., 50c; 3 lbs., \$1.35; postpaid. See enclosed pink price list for peck and bushel prices.

White or Dutch Clover

White Clover. Very Valuable for Lawns. Perennial, 4 to 9 inches. This is the common, little running clover found in most good pastures. Its chemical analysis shows it to be richer in protein than almost any other legume which we grow for forage. It is, of course, too small to grow for hay, but it is invaluable in all pastures, and no pasture mixture would be complete without it; we can thoroughly recommend discing old blue grass pastures and sowing a mixture largely composed of this clover to improve both quantity and quality of the pasture.

PRICE: Lb., 75c; 3 lbs., \$2.00. See enclosed pink price list for peck and bushel prices.

Sand Vetch

The Great Hay Producer

Sand Vetch is becoming more familiar each year, as farmers learn of its great value. It is very hardy, is valuable. As its name implies, "Sand Vetch" is especially adapted to light, sandy and poor soils, too poor to produce good crops of cow peas, soy beans or Crimson Clover, but will respond much more liberally on stronger and better lands.

It improves the soil, being a great nitrogen gatherer. It belongs to the pea family, but the vines are much longer and the foliage is more abundant. It may be sown either in the spring or fall with about half a bushel of rye or other winter grains for support. It grows rapidly and is particularly valuable where clover does not thrive. In the North it remains green all winter under the snow, and is invaluable for early pasturing or soiling. The value of an acre of Vetch plowed under equals commercial fertilizer at the rate of \$40 an acre. When sown in August or September it covers the ground before frost and prevents leaching of the soil during the winter and spring. When sown in April or May it can be cut in July, the second growth affording excellent pasture during the fall. The yield of green fodder is from twelve to twenty tons an acre. When raised for hay it should be left standing until some seed have become well formed. Sow forty to sixty pounds of Vetch and with it half a bushel of rye to the acre.

PRICE: Lb., 60c; 3 lbs., \$1.50; postpaid. See enclosed pink price list for peck and bushel prices.

New Crop, Recleaned, Tested Clover Seed



SWEET CLOVER

Three Times as Valuable as Red Clover.

AS A PASTURE PLANT Sweet Clover is most valuable. It is the first forage plant in spring that affords green food to animals and the last one that is killed by frost, and in midsummer it is cheerfully green when all grasses are dry and parched. Its grazing capacity is one beast per acre. It grows very rapidly, and as soon as it is 5 to 6 inches tall the cattle should be turned on, as tramping the ground suits it, and it should never be allowed to grow very tall or it will get hard and woody; if kept eaten down not too close to the ground the plants will throw out fresh growth on all sides as fast as eaten off, thus furnishing a constant supply of tender growth until frost.

The sowing of seed is done from early spring until July 1st in the north and later in the south. Use 15 pounds seed per acre.

Read Carefully THE PRICES OF ALL GRASS AND CLOVER SEEDS ARE CONSTANTLY CHANGING AND SUBJECT TO MARKET FLUCTUATIONS, AND IT IS ALWAYS BEST TO WRITE FOR LATEST AND LOWEST QUOTATIONS, BUT TO CUSTOMERS AT A DISTANCE, WHO CANNOT LOSE THE TIME REQUIRED TO DO THIS, WILL SAY, IF PRICES ARE LOWER, THEY WILL GET THE FULL BENEFIT. IF HIGHER, WE WILL SHIP ALL THE MONEY SENT WILL PAY FOR. For prices, see Price List enclosed.

White Blossom Sweet Clover Cannot be overestimated for Hay and Pasture for horses, hay and pasture for cattle, hay and pasture for sheep, hay and pasture for swine, honey plant for bees, as a sowing crop for stock, increasing the milk supply; plowing under as a fertilizer; introducing bacteria to the soil; reclaiming worn-out land, preventing erosion and washing; growing on hillsides and steppes; utilizer of barren land.

Sweet Clover Its value is just becoming known; growers who had experience with sweet clover estimate its value as follows: \$4.00 per acre for honey; \$23.00 per acre for hay and pasture; \$25.00 per acre for seed. Total, \$51.00. To this should be added its value as soil renovator, which is very much more than 25 wagon loads of stable and barnyard manure. It is a biennial leguminous plant, tall, somewhat like coarse alfalfa, growing 6 to 8 feet high. Its blossoms, which rarely appear until the second year, are white and give a strong smell of honey, quite perceptible some distance away. If not allowed to reseed, it will die out the second year.

Sweet Clover is an invaluable crop. Nothing superior for fertilizing—equal to Alfalfa in feeding value, excels for pasture purposes, greatest of all honey plants, inoculates land for alfalfa. No plant approaches it when it comes to making money; easy to produce \$100 per acre by growing Sweet Clover. You cannot make money faster than by growing Sweet Clover.

Soil—Sweet Clover grows in all parts of the United States; it possesses a wider adaptability in regard to soil and climate than any other clover or alfalfa. It thrives on the poorest, sandy soil and on dry hillsides, where no other clover will grow; in the west, where irrigation forced the alkali to the surface with the result that it has killed all vegetation except some saltweeds, sweet clover is the only plant that will grow and make a good yield. It will endure more drought than alfalfa.

Sow White Sweet Clover seed $\frac{1}{2}$ inch deep only. Sweet Clover requires a thoroughly compacted seed bed, with just enough loose soil on top to enable the seed to be covered. It is usually the best to seed on ground like corn stubble.

When growing for seed north of middle Iowa allow the second crop to go to seed. South of middle Iowa the third crop is used for seed.

This year we are only handling a very select stock of the hulled seed, as we have installed a machine for scarifying the seed, thus wonderfully increasing the germination and growth.

PRICE: Lb., 50c; 3 lbs., \$1.35; postpaid. See enclosed pink price list for peck and bushel prices.

Alfalfa, or Lucerne

ALFALFA, THE GIANT AGRICULTURAL CLOVER—KING OF ALL CROPS.

Yields two to three tons per acre each cutting, three to four crops per year. A wonderful plant that has turned the great West into a paradise of wealth. It grows successfully in every state in this Union, and is adding millions of wealth every year to the farmers. Produces more valuable feed to the acre than any other forage plant on earth. It has many points of excellence that commend it to every wide-awake farmer. It has great feeding value, containing as much protein as wheat bran. It is a wonderful soil enricher; splendid, valuable feed for hogs. The United States Department of Agriculture says:

"In addition to the hay and seed crop, Alfalfa adds \$100 to the value of every acre on which it grows." There is no state in the Union in which Alfalfa cannot be successfully grown. Alfalfa produces three to eight tons per acre. Three hundred stalks have been grown from one seed. It does not exhaust the soil, but enriches it equal to clover. It can be ground into meal and hundreds of carloads are being ground every week by alfalfa mills to feed cattle, hogs, horses and poultry. Alfalfa in money value is worth 45 per cent more than other clovers and 60 per cent more than timothy. It would hardly be possible to say too much about Alfalfa. It is a working plant which is changing the destiny of many farming sections.

Its long branching roots penetrate far down into the earth, push and crowd this way and that and thus constitute a gigantic subsoiler. These become an immense magazine of fertility to be drawn upon by other crops for many years after.

A Few Hints on Alfalfa The presence of lime in some form, either in the soil or subsoil, is essential. If it is known there is no lime in the soil, lime should be applied as a top dressing, when the land is being plowed preparatory to sowing the seed. **GOOD DRAINAGE IS NECESSARY**, for an excess of surface water rots out the roots.

We only sell one grade or quality of Grasses, Clover, Alfalfa, etc.—Absolutely and Positively the Best—no two or three brands, such as "Prime," "Choice," "Fair," etc., but the best that can be grown.



Our Alfalfa, Nebraska Dry Land Grown

The great bulk of American seed is grown under irrigation and does not possess that vitality in adjusting itself to normal conditions that seed does where grown under natural conditions. We purchase all our seed direct from the growers in Central Nebraska, and know what we are getting; therefore you can rely upon seed that you get from us being grown under natural conditions and of the best quality that can be produced.

PRICE: Lb., 50c; 3 lbs., \$1.25; postpaid. See enclosed pink price list for peck and bushel prices.

When you buy your seeds from us you run no risk. If not entirely satisfactory on receipt you may return them at our expense and money paid for them will be refunded.

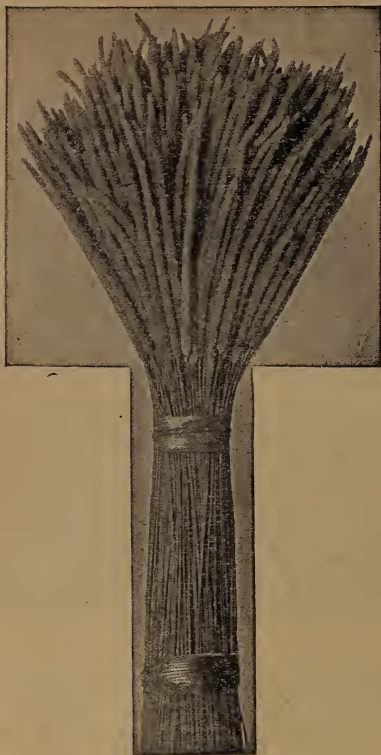
Sow Dependable "Jefferson Brand" Clover Seed

Grass Seed Hardy Northern Grown

Read Carefully Prices on Grass, Clover, Alfalfa, Millet and Cane Seed ("Sorghum"), are so fluctuating in value that it is impossible to accurately foretell or gauge future prices and values. Therefore it would be well to write for latest quotations. But to customers at a distance who cannot lose the time required to do this, will say, if prices are lower they will get the full value of money sent. If higher we will ship all the money sent will pay for.

Prices quoted here are by parcel post, prepaid. For bulk prices see Price List enclosed.

We pride ourselves that no house in America takes more care in cleaning and placing on the market a superior grade of grass seed than our house does. **WE CALL SPECIAL ATTENTION TO ABOVE PARAGRAPH** by reason of many perplexities we have encountered in handling grass and clover seeds. Many times our catalogue prices and quotations have been entirely out of line, either above or below current prices a month or two after our catalogue had gone to press, but our customers can always rest assured that our prices will be in line with any other reliable seed house in the country.



Timothy Sheaf.

country, **BROMUS INERMIS** is the greatest. None has ever proven so valuable and of such great importance. It is a hardy perennial, withstanding the extremes of heat and drouth and of cold better than any cultivated grass. It has been fully proven that it will not only succeed and grow under about any conditions, but will do well where timothy, clover, orchard grass or alfalfa will wither and die. It also makes the most astonishing yields under such unfavorable conditions. It is a native of Europe and Asia, ranging from France eastward into Siberia. It is thoroughly permanent and grows with wonderful rapidity, producing heavy crops and luxuriant pastures. Its value to farmers of dry regions cannot be overestimated. All kinds of stock eat it with relish, and chemical analysis shows it rich in flesh-producing ingredients, much more so than timothy. It starts very early in spring and grows later than any other grass in the fall. There is no grass that will withstand the extreme changes in temperature that **BROMUS INERMIS** does without injury. Grows 24 to 36 inches in height, and can be cut two or three times per year. Should be sown in the fall or early in the spring, using twenty pounds seed per acre if sown alone, or if with alfalfa use twelve pounds with eight pounds alfalfa. Our stock of **BROMUS INERMIS** is new crop grown and can be depended upon to grow vigorously and give good results. May be sown in autumn with winter wheat, or in early spring.

For hog pasture a mixture of Bromus Inermis and alfalfa, where the latter succeeds well, is recommended by the Kansas State Agricultural College, and they also suggest for large pastures for cattle a mixture of the following per acre: Bromus Inermis, ten pounds; Orchard Grass, eight pounds; Meadow Fescue, eight pounds; Red Clover, one or two pounds, added to the mixture. For worn-out pastures they advise a disc early in the spring, following with a harrow, and sow Bromus Inermis on the land, putting most on places where native grasses are most killed out.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

Meadow Fescue or English Blue Grass

All points considered, this grass must be regarded as one of the most valuable grasses that can be sown anywhere in this country. Its most important features are that it is drought resisting, frost resisting and furnishes an abundance of pasturage early in spring and late in fall when other grasses have not come up or have died out.

It is suited to a wide range of soils, does well on loamy, clay and gravelly soils, and thrives on heavy black loam, strong and low-lying soils; in wet places in a pasture when trampled down by the stock where Timothy, Red Clover and Kentucky Blue Grass fail, Meadow Fescue is the only grass that will keep these places productive, and no amount of trampling is able to destroy it. It is not adapted to light, sandy soils.

Meadow Fescue is of the greatest value if sown in connection with other grasses and as farmers realize the value of mixtures of perennial grasses for pastures or meadows, the demand for Meadow Fescue will be greatly increased, mainly because it is so sure to grow and come up quickly, keeping the weeds down and furnishing forage while the weaker grasses are getting started. Meadow Fescue matures at the same time as Timothy and Red Top and Alsike Clover and for meadows these varieties are often grown together. It is easily exterminated. When plowed up, it's dead for keeps.

Sow ten to fifteen pounds per acre broadcast without nurse crop. Our seed is absolutely pure; has a vitality of 100 per cent.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

Timothy

is so well known that it needs hardly any description. There is scarcely a variety of natural or tame grass that is so generally cultivated as this. It is suited to moist, rich land, where it grows to perfection and yields under favorable circumstances large crops of hay. If cut at flowering time, it makes splendid nutritious hay; for pasture it cannot be recommended, as almost every farmer knows; close pasturing is injurious to it. When sown with red clover or Alsike clover it makes a splendid mixture, and where it is about half and half the timothy yields fully as much as it alone, and you have the clover crop extra. One feeds off the soil and the other the air; the clover greatly enriching the land. For this reason we have added timothy to all of our clover mixtures, where circumstances will allow.

We want to insist and encourage those who anticipate sowing to order their grass seeds early. Market prices are so fluctuating we do not undertake to make firm prices beyond present stocks, which are at present sufficient under ordinary conditions to meet the requirements of our trade.

PRICE: Lb., 30c; 3 lbs., 75c; postpaid. See enclosed pink price list for peck and bushel prices.

Bromus Inermis

THE UNCROWNED KING OF THE DESERT AND DRY, SANDY SOILS. Of all the grasses that grow or were ever introduced into this



Orchard Grass

A valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green bite in the spring and the last in the fall, and is quick to recover from close cropping, and even thrives better the more it is cropped. Suited to shady places, orchards and groves. Sow fifteen pounds per acre.

PRICE: Lb., 50c; 3 lbs., \$1.35; postpaid. See enclosed pink price list for bulk prices.

Kentucky Blue Grass

Our "JEFFERSON BRAND" **KENTUCKY BLUE GRASS.** We pride ourselves on this extra choice grade, which is of such unusual purity and high germination that it is of special value for lawns.

PRICE: Lb., 50c; 3 lbs., \$1.35; postpaid. See enclosed pink price list for bulk prices.

Caution

We wish to **WARN** all prospective purchasers of Grass, Clover and Alfalfa Seed to be careful in buying their seeds this year. Fully one-half or more of the grass and clover seed offered this year will be foreign imported seed, grown no one knows where, nor nothing about the age of it, and possibly full of noxious and dangerous weed seeds.

ALL SEEDS NAMED OR QUOTED IN THIS BOOK ARE "JEFFERSON BRAND."

TIMOTHY AND ALSIKE CLOVER MIXTURE. This is a better combination for either pasture or meadow than Medium Red Clover and Timothy, as they will flower and ripen at the same time. Alsike Clover can be sown to good advantage on moist soil and will make a much finer hay than this, being free from fuzz and rust, and will not cause the horses to cough.

The seed that we offer has been raised together, and being both of the same size, they cannot be separated, so that we have to sell it at a reduced price. The seed contains about a third Alsike Clover and the balance timothy, or is as near in that proportion as we can tell, which is just the proper proportion for sowing. It should be sown at the rate of ten pounds per acre.

PRICE: Lb., 50c; 3 lbs., \$1.35; postpaid. See enclosed pink price list for bulk prices.



Italian Rye Grass

Italian Rye Grass

It is a wonderfully rapid grower and returns heavy hay crops. It is particularly adapted for pastures or meadows, where it thrives luxuriantly. Is a strong grower, arrives at maturity sooner, has a greater abundance of foliage, grows considerably taller, is more upright and, upon the whole, produces more than the English Rye Grass.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

English Rye Grass

It is found to flourish on all kinds of soil, and does well on upland, though rich and moist soils are the most appropriate. It arrives at perfection and produces in its first year of growth; has a greater supply of early herbage, which is much liked by cattle. Cut for hay immediately after blossom.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

Tall Meadow Oat Grass

For either hay or permanent pasture a most valuable grass, which can be successfully grown in all parts of the country. It will not winter-kill, but will live and endure our cold northern winters, and can also be grown in parts of the country where it is very hot and dry. This variety starts early in spring and is very valuable pasture grass on this account. It is seldom sown by itself, but mostly with other varieties, as with our Clover Grass Mixtures, where it gives the best results. Succeeds best in deep, rich, sandy soils and even on clay and heavy, dry soil it does well. It is a true perennial, growing 3 to 5 feet high, and flowering in May and June. It is a splendid grass for the southern states.

PRICE: Lb., 50c; 3 lbs., \$1.35; postpaid. See enclosed pink price list for bulk prices.



Tall Meadow Oat.

Red Top

A hardy, native perennial grass, succeeding best on moist land. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands hot climates admirably. It is the most permanent grass we have. It remains green for the greater part of the year. Sown largely in marshy land and sloughs in the West. In the East it is one of their principal sorts. Fancy cleaned seed.

One of the best mixtures for swampy, marshy, wet land or land that sometimes overflows is Red Top and Alsike Clover, mixed five pounds each to the acre.

PRICE: Lb., 40c; 3 lbs., \$1.00; postpaid. See enclosed pink price list for bulk prices.

Johnson Grass

As a meadow or hay grass this variety is highly esteemed in the South, where, during the hottest and driest seasons it can be relied upon to yield heavily. Its value, as shown by chemical analysis, is better than timothy hay. When cut at time recommended there is no possibility of introducing this grass where it is not wanted. We only advise the sowing of Johnson Grass where it is desired to remain as permanent meadow. Should be sown August to October, or in spring, at the rate of one bushel per acre.

PRICE: Lb., 60c; 3 lbs., \$1.50; postpaid. See enclosed pink price list for bulk prices.

Bermuda Grass

This is a perennial grass of creeping habit, very valuable for the southern states, as it withstands drought better than any other variety. It has long, creeping stems which root at the joints and cover the ground with strong matting of fine turf. It is a splendid pasture grass, furnishing excellent summer pasture when most other grasses are burned out. Grazing and trampling of stock does not impair it. It is also much used for lawns in the South, as it stays green all summer. It is of no value for the northern states, as it freezes out farther north than southern Kansas, Missouri and Illinois. It does well on any kind of soil, thrives on the poorest and sandiest soils. The seed is sown in spring at the rate of 3 to 5 lbs. per acre.

PRICE: Lb., 75c; 3 lbs., \$2.00; postpaid. See enclosed pink price list for bulk prices.

Lawn Seed Grass

A smooth, velvety lawn surrounding a house adds not only to the value, but enhances the enjoyment of every home. The most important thing to consider in selecting seed for a lawn is to obtain a proper mixture of several varieties. By properly choosing early, medium and late grasses a smooth, even green lawn is assured from early spring to late autumn. A given area can support only so many grass plants of one kind, for they all absorb the same kind of food, but if several varieties are sown the same area will support many more plants, as different sorts live on various elements in the soil. With these facts in mind our **IOWA CHIEF BRAND LAWN GRASS** is scientifically mixed and combined. Our experience of many years has given us intimate knowledge of grasses, their habits and requirements.

PRICE: Lb., 50c; 3 lbs., \$1.25; postpaid. See enclosed pink price list for bulk prices.

"JEFFERSON BRAND" FINEST SPECIAL MIXTURES

These Clover Grass Mixtures are selected with the greatest of care and composed of varieties best adapted for different kinds of soil and purposes. From our experience as well as experience of our customers in every part of the country, we are enabled to select in these Clover Grass Mixtures not only the varieties that are suited to the soil, but have them in the right proportion in each mixture. In every instance we mention the quantities which we recommend to be sown per acre and not only have these proven to be sufficient in our experiments, but they have proven to be equally successful and sufficient with our patrons. **PRICE:** All mixtures, lb., 40c; 3 lbs., \$1.00; postpaid. For bulk prices see enclosed pink price list.

OUR SPECIAL MIXTURES FOR HAY.

No. 1. For moist ground and rich soil. Sow 18 lbs. per acre. Italian Rye Grass, Meadow Fescue, Timothy, Alsike, Tall Meadow Oat Grass, Red Top.

No. 2. For moist ground which is occasionally overflowed. Sow 16 lbs. per acre. Red Top, Timothy, Bromus Inermis, Meadow Fescue, Alsike.

No. 3. For high and dry ground, high or medium soils. Sow 20 lbs. per acre. Timothy, Red Clover, Rye Grass, Alfalfa, Meadow Fescue, Orchard Grass.

No. 4. For high or dry ground, heavy or strong soil. Sow 20 lbs. per acre. Tall Meadow Oat Grass, Timothy, Hard Fescue, Red Top, Red Clover, Meadow Fescue, English Rye Grass, Alsike.

OUR MIXTURE FOR PERMANENT PASTURE.

No. 7. For moist ground and rich soils. Sow 20 lbs. per acre. Meadow Fescue, English Rye Grass, Red Top, Alsike, Blue Grass, Alsike Clover, Timothy, Red Clover.

No. 8. For high and dry ground, clay or heavy soils. Sow 22 lbs. per acre. English Rye Grass, Timothy, Meadow Fescue, Red Clover, Tall Meadow Oat Grass, Blue Grass, White Clover, Orchard Grass, Alsike.

No. 9. For high and dry ground, light soils. Sow 22 lbs. per acre. Alfalfa, English Rye Grass, Oat Grass, Red Clover, Meadow Fescue, Red Top, White Clover.

No. 10. To improve pastures by top seeding, or for low, rich, marshy ground. Sow 10 lbs. per acre. Tall Fescue, Red Top, Alsike, Bromus Inermis.

Sow Dependable "Jefferson Brand" Grass Seeds



Everybody Loves Flowers

Flowers are inexpensive, and if you select the right kind they are as easy to grow as weeds, but everybody is not familiar with the kind of flower seed to buy and the quantity to buy to make the quickest and most satisfactory showing. We are, however, pleased to offer a very choice list of the most popular and easily grown flower seeds. They are all strictly fresh, new crop grown, and of the very best obtainable. We much regret that space will not admit of a complete illustration of all of them. We might add that we could have listed and illustrated a thousand other additional varieties, but it would have only bewildered and confused you, and we have ultimately selected the well-known and most popular varieties—varieties tried and tested and known to be first class and of the hardest and most beautiful, and of unlimited colors.

As a matter of fact, it doesn't take much of an investment in flower seeds to produce a very satisfactory flower garden which will give you bloom throughout the entire season.

But you owe it to your children, as well as yourself, to have a nice flower garden. They like flowers and turn instinctively to these pets of mother earth. They appeal to the finer sensibilities. Nature teaches the little ones many noble lessons through the flower garden. Give them a patch by the house and watch the joy of their young faces as the first leaves come through and the exclamation of happy glee as one bloom after another appears. Don't deny your little ones these happy days in their young lives.

The question of cost is scarcely a consideration when a whole family can enjoy the beauty of a perfectly lovely flower garden for only a dollar or two.

Beautiful American Asters

Cultural Note on Asters.

The cultivation of the Aster is simple. Do not sow the seed too early; the middle of March indoors is considered a very good time. Successive sowings should be made, if a constant supply of flowers is desired from July until frost. For early use sow the seed in shallow boxes, covering with one-fourth inch of soil. Later sowings may be made in hotbeds or cold frames; or in the open ground, broadcast or in drills, when all danger of frost is past. Never use the same ground or location twice in succession. The soil should be rich and moist. We recommend pulverized sheep manure, wood ashes and phosphates as fertilizers. If barnyard manure is used it should be thoroughly decomposed. Allow plants plenty of room; rows should be 3 feet apart and 15 inches between the plants in the row, but the distance may be less according to the habit or growth of the variety.

The aster beetle or fly is one of the worst pests, but there seems to be only one crop of them, and these if caught and killed are not usually followed by others. Dusting the plants with air-slacked lime or dry ashes will be found beneficial. Root lice and cutworms are also troublesome. Applications of kerosene emulsion or tobacco water around the roots are effective. Aster blight or "yellows" can usually be traced to the work of the above pests.

The plants should be pulled and burned if they should become badly diseased. Growers should remember that prevention is better than cure. Good cultivation and the timely use of the remedies suggested should produce healthy, vigorous plants.

Early June Aster

The Earliest Flowering Variety Grown, Leading All Other Early Asters by Fully Two Weeks. (See Illustration Above.)

This new dwarf Aster is very valuable for its extreme earliness, coming into flower fully two weeks before Queen of the Market, heretofore the earliest type, and a month before Perfection, Victoria and similar classes. The plants of "Early June" Aster are of healthy, robust, branching growth, about 18 inches high, and bear freely and in succession for many weeks—on long, wiry stems, perfectly formed double pure white flowers $2\frac{1}{2}$ to 3 inches in diameter, the petals of which slightly recurve. For garden beds, "Early June" is very effective, and for cut flowers most useful.

PRICE: Large packet, 10c; 3 packets, 25c.

American Branching Aster

This Aster is a strong grower, 2 to $2\frac{1}{2}$ feet high, and its tendency to form numerous branches is very marked. The flowers are borne on very long steps and are four inches and more in diameter. The petals are broad, long and many of them more or less twisted or curled in such a manner as to give the blooms the appearance of large, loose and graceful Chrysanthemums. Unexcelled for cutting.

White.

Lavender.

Purple.

Pink.

Crimson.

Mixed.

PRICE: Any color, large packet, 10c; 3 packets, 25c.

Queen of the Market Aster

Very early. Of rare beauty, dwarf and branching in habit, with large flowers of various colors. Its chief merit is its earliness—three weeks ahead of other Asters, except our Early June. The flowers are of good size, double and are borne on long stems, making them valuable for cut flowers. Plants grow about 12 inches high.

White.
Pink.

Crimson.
Light Blue.
Mixed.

Dark Blue.
Lavender.

PRICE: Any color, large packet, 5c; $\frac{1}{2}$ oz., 60c.



New Aster "Sensation"

The reddest of all red Asters. The plants are similar to the ox-blood red which glistens in the sunshine like a live coal. The plants are of free-branching habit, about 18 inches high; the large, very double flowers are borne freely on stems a foot long from early in August till the close of September.

PRICE: Large packet, 15c; 2 packets, 25c.

Lavender Gem Aster

An early sort of the Comet or Ostrich Feathered type of the most charming color imaginable, making it one of the finest Asters for cut flowers. A delicate lavender deepening with age. Feathery, full double flowers, on slender, wiry stems. Plants of medium height. As early as Queen of the Market, flowers larger.

PRICE: Large packet, 10c; 3 packets, 25c.

New Crimson King Aster

Lovely new Aster of that rich, brilliant crimson color, so much desired by every lover of Asters. The plants are similar to the American Branching Asters; vigorous in growth, with long, stiff stems and flowers of the largest size. The petals are folded lengthwise, so that they somewhat resemble the quilled varieties, giving the large flowers a bold and striking appearance. A splendid cut-flower variety.

PRICE: Large packet, 10c; 3 packets, 25c.



Candytuft.

Candytuft

Candytufts are among our best plants for edging, bedding and for cutting. They are hardy annuals, bearing profusely large spikes of flowers during the season. Sown outdoors in April, the plants will bloom in July; they are also sown in autumn and will then bloom early in spring before many other flowers are visible. 12 inches high.

PRICE: Large packet, 10c; 3 packets, 25c.

Chrysanthemums

(Early Annual)

The glorious and showy autumn blooming Chrysanthemum, which are now so much admired and cultivated, have their relatives among the summer annuals which are easily raised from seed. The plants can be raised by sowing the seed early in the house or frame and planting them out when the weather is favorable, or the seeds can be grown in an open seed bed, or where the plants are to stand, provided the plants are thinned out to 8 to 12 inches apart. A little shade, or shade in the after part of the day is desirable for them—a border on the east or northeast side of the house would be desirable. Pull them back until July 15th to make them grow branching and full.

PRICE: Large packet, 10c; 3 packets, 25c.

Carnations

(Marguerite Carnations)

Annual. These are deservedly the most popular Carnations with the amateur, as they begin flowering in a few weeks from time of sowing. The strain offered is of extra fine quality, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers. With slight protection they will survive an ordinary winter and bloom freely the following spring.

PRICE: Large packet, 10c; 3 packets, 25c.

Forget-Me-Not (Myosotis)

These daintily elegant little flowers are hardy perennials that love cool, moist soil, and like pansies, bloom most freely in the fall thickly sprinkled with pretty flower-sprays, and will bloom nicely in and early spring. They make beautiful close borders, or edgings, winter in a cool room or coldframe. Once at home in garden they establish themselves by self-seeding. All the varieties are general favorites. Sow in spring in a warm, sunny border. Most varieties bloom freely the first season and profusely the second. Average height, 6 inches.

PRICE: Large packet, 5c.

Flowers

Antirrhinum (Snapdragon)

(Hardy Annual)

Antirrhinums, in recent years, have become very popular; they are very satisfactory for borders, bedding, pot culture for house decoration and are largely forced during the winter for cut flowers. The healthy, robust plants are free and continuous blooming with their long spikes of various colored flowers. In the Southern states, they are hardy, but in the North they are best treated as annuals. Easily grown from seed; from spring-sown seeds, flowered plants may be had in July, which continue to bloom profusely until frost.

PRICE: Large packet, 10c; 3 packets, 25c.

Celosia— Cockscomb

Very attractive annuals; free flowering, and do well in ordinary garden beds or borders. The crested heads of flowers resemble a cock's comb. The plumed heads are like great feathers. The colors are varied, but the scarlet and crimson shades are the most beautiful and rich. Sow the seed directly in the garden or start early and transplant. Make fine pot plants.

PRICE: Large packet, 10c; 3 packets, 25c.



Antirrhinum:

Daisies—Arctotis (African Daisy)

ARCTOTIS (African Daisy)

GRANDIS—Annual. A remarkably handsome annual from Africa. It forms much branched bushes 2 to 3 feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue. It is easily grown from seed, and may be started in hotbed, in the house in March or April, or in the open ground in May, the seed germinating in about five days and the plants may be expected to come into bloom early in July and continue until quite hard frost; being one of the rare flowers not injured by light frosts, and will be a mass of bloom long after the more tender flowers of the garden have passed away. It delights in a sunny situation.

PRICE: Large packet, 10c; 3 packets, 25c.

Dahlia

But few people know Dahlies can be raised from seed and will bloom the first year. The seeds germinate as easily and certainly as Zinnias, and from the very first development are strong and sturdy little plants. Plant them in a shallow box or pan early in March or April, transplant them carefully as their growth demands, and keep the soil moderately moist. When all danger from frost is over, plant them in the bed or border in the garden, and from then on they will prove no more trouble than if the tubers had been used instead of seed.

PRICE: Large packet, 10c; 3 packets, 25c.

Dianthus or Pinks

Most beautiful and satisfactory summer-flowering annuals. Unrivalled for brilliancy and rich variety of color; the plants are bushy, of symmetrical form, one foot high. The flowers are immense, averaging six inches in circumference, are densely double and are produced in perfect succession during the whole summer and autumn in such numbers as fairly to crowd each other for room. There is a wonderful diversity of colors, from purest satiny white to red-sheds so deep and intensely brilliant that the eye can scarcely penetrate their velvety depths; soft pinks and flesh tints more dainty than blush could lay; and a large proportion of flowers heiroglyphically marked with various hues, the delicate tints and deep tones mingling in exquisite contrast.

From seed sown early in the spring, will bloom in July and centage double, usually about three inches in diameter.

PRICE: Large packet, 10c; 3 packets, 25c.

Cypress Vine and Cardinal Climber

These beautiful twining annual climbers are not as much grown as they deserve. Seed started in pots early in the house or hotbed, and seedlings set out in the garden after danger of frost, will make plants 20 feet high and be completely covered for three months or more with beautiful star-shaped tubular flowers borne in clusters that contrast effectively against the feathery fern-like, bright-green foliage. Sown in the open ground they will of course commence flowering later. In the latter event the hard-shelled seeds should be soaked in hot water.

PRICE: Large packet, 10c; 3 packets, 25c; oz., 60c.

Flowers

Verbena Hybrida

We offer a specially selected strain of these beautiful flowers. They are particularly adapted for beds, borders, or window boxes. Some authorities advise soaking the seed for a few hours before sowing. Sow in shallow boxes in hotbeds, and when seedlings are large enough to handle, transplant into baskets or shallow boxes. Plant in the open ground about June 1st.

PRICE: Large packet, 10c; 3 packets, 25c.

Heliotrope A well known, profuse flowering and deliciously fragrant plant that everyone loves. Splendid for bedding or pot culture. Can be easily raised from seed, but should be started early in the house. Half-hardy perennial.

PRICE: Large packet, 10c; 3 packets, 25c.

Sweet William (Finest Mixed.) Hardy plants about one foot high, of extreme richness and variety of color, and also deliciously sweet-scented. Our mixture is of the large flowered strain and contains many bright and beautiful colors and markings.

PRICE: Large packet, 10c; 3 packets, 25c.

Sunflower Some varieties of this well known plant are very ornamental, and are effective in proper situations in shrubby borders or as screens.

PRICE: Large packet, 5c; oz., 20c.

Hollyhocks All our seeds of this beautiful plant have been saved from the finest and largest double flowers only, and will produce flowers extremely double and in the best, brightest and most charming colors. Sow early.

PRICE: Large packet, 10c; 3 packets, 25c.

Ice Plant Pretty summer annual trailer for vases and rock-work; leaves covered with ice-like drops. Much used in Europe for garnishing; half foot.

PRICE: Large packet, 10c; 3 packets, 25c.

Marigold (Tagetes.) A free flowering plant of easy culture, with double flowers of rich and beautiful colors, producing a splendid effect, whether planted in beds or borders, and continuing in beauty until destroyed by frost. Half-hardy annuals.

PRICE: Large packet, 5c; oz., 40c.

Mignonette (Reseda Odorata.) This fragrant little plant is probably the most popular annual grown. If the plants are thinned out they will grow stronger and produce larger spikes of flowers.

PRICE: Large packet, 5c; oz., 25c.

Morning Glories (Fine Mixed.) A mixture of the old varieties.

PRICE: Large packet, 5c; oz., 25c.

Petunias Indispensable flowering plants for both garden and pot culture, flowering continuously. They flower in a few weeks' time from seed. Height about one foot.

PRICE: Large packet, 10c; 3 packets, 25c.

Alyssum, Sweet Excellent for borders and the flowers are fine for bouquets. Flowers are white, very fragrant and produced abundantly through the summer and until after severe frosts. Hardy annual. Height one foot.

PRICE: Large packet, 5c; oz., 40c.

Hyacinth Bean (Dolichos Lablab.) Splendid climbers with abundant clustered spikes of purple and white flowers, which are followed by exceedingly ornamental seed pods. It is of rapid growth and often runs 30 feet in a season. Height 10 to 20 feet. Tender annual.

PRICE: Large packet, 10c; 3 packets, 25c.

Balsam (Lady's Slipper)

(Hardy Annual)

An old and favorite, quick growing annual, producing large, brilliantly colored flowers. Blooms are borne along the stem, among the leaves; frequently whole upper part of the plant is a mass of color. Height 10 to 30 inches. The Lady's Slipper is of easiest culture, and succeeds in any rich soil. It is well to sow the seeds thickly, in a temporary row, and then transplant to permanent quarters.

PRICE: Large packet, 10c; 3 packets, 25c.

Bachelor's-Button It is a beauty, a great favorite in all parts of the old country. An unique little plant, forming a dense mass of foliage, over which are borne hundreds of lovely blue blossoms, beautifully fringed and serrated. Hardy annuals; two to three feet high.

PRICE: Large packet, 10c; 3 packets, 25c.

Fox Glove (Digitalis.) Showy for background when planted among shrubs, and are very beautiful garden soil. Fine mixed colors. Thrives in any ordinary soil.

PRICE: Large packet, 10c; 3 packets, 25c.

Gourds (Climbing.) These curious and interesting plants should be more largely grown. All varieties mixed.

PRICE: Large packet, 5c; oz., 30c.

Four O'clock (Marvel of Peru.) Everyone knows this favorite annual.

PRICE: Large packet, 5c; oz., 25c.



Verbena.

Ageratum Valuable plant for large beds or borders, and very useful where cut flowers are in demand; in bloom the whole summer. Also good for winter blooming in pots; succeeding in any soil. Indispensable for bouquets. Hardy annuals.

PRICE: Large packet, 10c; 3 packets, 25c.

Nasturtium One of our showiest and most popular annuals, forming compact plants, making gorgeous masses of rich colored and brilliant flowers.

DWARF: Large packet, 5c; oz., 25c.

TALL: Large packet, 10c; 3 packets, 25c; oz., 35c.

Cosmos Mammoth Perfection. Seed sown in April or May and transplanted to open ground will produce plants five or six feet high by September, and from then till November will be covered with hundreds of blossoms three inches across, resembling single dahlias. All colors, mixed.

PRICE: Large packet, 5c; oz., 50c.

Larkspur (Delphinium.) Plants of great beauty, richness and endless variety of colors, with great duration and profusion of bloom. DOUBLE FINE MIXED. Many varieties and colors.

PRICE: Large packet, 10c; 3 packets, 25c.

Poppies

Probably no class of plants enjoys greater popularity and is more widely grown than the Poppies. The wonderful range of color of their delicate, gracefully borne flowers is well known. The poppies are quite hardy and the seed should be sown as early in the spring as possible, where the plants are to remain.

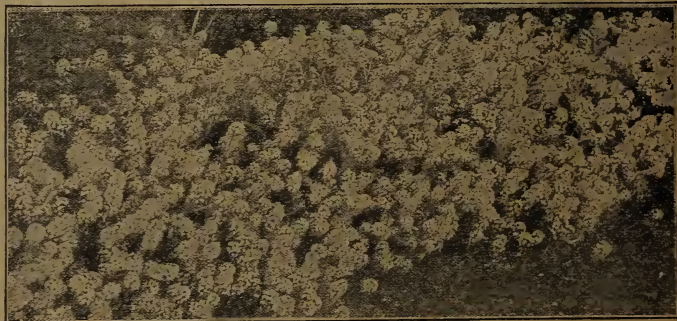
PRICE: Large packet, 5c; oz., 40c.

Canterbury Bells Very ornamental garden plants of easiest culture; hardy biennial, 2 1/2 feet high, producing large, bell shape flowers of exquisite colors. Fine mixed.

PRICE: Large packet, 10c; 3 packets, 25c.

Portulaca In brilliancy and beauty of colors Portulacas are unrivaled. They delight in sunny situations and light soils, where they rapidly carpet the ground.

PRICE: Large packet, 10c; 3 packets, 25c; Single or Double.



Sweet Alyssum.

Flowers

Pansies

Our Pansy seeds are grown exclusively for us from the most noted seed, and we know they cannot fail to give the most unbounded satisfaction to amateur and professional grower alike. Sow in the house, hot-bed, or greenhouse; or as soon as the weather permits, the seed may be sown directly in the garden beds. Pansies thrive best in a rich soil, and cool moist situation; they do splendidly in partially shaded places. They do not do well under trees, but in some locations where the sun strikes only part of each day, satisfactory results can be obtained. Seed sown from July to September and the young plants transplanted into cold-frames for the winter, will bloom grandly very early the following spring.

Giant Flowering Pansies

A distinct class. Plants vigorous and compact. The flowers are thrown well above the foliage and many of them are marked with large blotches. They are of enormous dimensions, some specimens grown on our grounds measuring over three inches in diameter. We offer the following separate colors.

Giant White Very large, well-formed flowers with dark purple eye.

PRICE: Packet, 10c; 3 packets, 25c.

Giant Pale Blue Gigantic blooms of a very delicate mauve-blue shade with paler centers, freely produced on compact plants.

PRICE: Packet, 10c; 3 packets, 25c.

Giant Purple Large, handsome flowers of a rich purple color, which contrasts effectively with Giant White. Comes very true from seed.

PRICE: Packet, 10c; 3 packets, 25c.

Giant Yellow Immense flowers, brilliant in color and of excellent form.

PRICE: Packet, 10c; 3 packets, 25c.

Giant Bronze A favorite and attractive coloring of bronze shades, all toning together. The flowers are of the largest size and of handsome form.

PRICE: Packet, 10c; 3 packets, 25c.

Giant Black Large, well-formed glossy-black flowers. The plants are compact and bloom for a long time.

PRICE: Packet, 10c; 3 packets, 25c.

Giant Spencer Sweet Peas

Sweet Peas are probably the most popular flower in America. They are loved by everyone, both for their beautiful coloring and delightful fragrance. They will grow anywhere you can raise common garden Peas. To secure beautiful blossoms, manure liberally or fertilize with bone-meal, trench deeply, plant thinly, stake early and water freely.

THE GIANT SPENCER OR ORCHID FLOWERED SWEET PEAS are the new large petaled wavy type of extraordinary size, a large percentage bearing four of these immense blossoms to the stem. They are the best in size, color, fragrance and abundance of bloom, representing the highest achievement in Sweet Peas.

New Spencer Varieties

Henrietta Newest and finest sort introduced to date. The color is a beautiful rose-pink on cream ground. The flowers are of truly enormous size and well filled; they look more like little pink roses than Sweet Peas. A few sprays together make a nice bouquet; for a dainty table decoration it is unsurpassed.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.00.

Fiery Cross Has all the appearance of live fire, the color being a bright fire-red, or scarlet, without any shading and which scintillates and glitters in bright sunlight. The beautifully waved and fluted flowers are borne freely in threes and fours, well placed on long stout stems.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.00.

Royal Purple Large, wavy flowers of a rich, royal purple, which is retained throughout the life of the flowers, and at no time does the objectionable blue-purple color show up.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.00.

Margaret Atlee The flower is a rosy, salmon-pink on a creamy buff ground. A rich, soft color and extremely attractive. Large and wavy, and runs almost uniformly four blossoms to the stem.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.00.

King White The grandest of all White Sweet Peas and of the most up-to-date Spencer form. It is manifestly the largest of the White Spencers. The stems are long and stout and bear practically always four blossoms.

PRICE: Large packet, 10c; oz., 35c; ¼ lb., \$1.00.

Salvia, Flowering Sage

The Salvia is now a standard bedding plant, its long spikes of flowers, borne in great profusion, keeping the garden bright with color from July until frost. A half-hardy perennial, blooming the first year from seed, which should be sown in March or April in a hot-bed or indoors and the young plants set out in the garden as soon as the weather has become settled and warm.

Splendens, Scarlet Sage Beautiful, large, bright scarlet flowers. Profuse and long season bloomers.

PRICE: Large packet, 10c; 3 packets, 25c.

Bonfire The finest of the scarlet Salvias, growing to a compact bush about 2 feet high and 2 feet in diameter. Its erect firing scarlet spikes stand clear above the dark green foliage.

PRICE: Large packet, 15c; 2 packets, 25c.

Everblooming Sweet Peas

This mixture is something especially rare; all blossoms are of unusually large size, brilliantly colored and shaded, deliciously fragrant, borne on long stems and bearing continuously until destroyed by severe frosts. It is impossible to describe the rare beauty of the brilliant tints.

PRICE: Large packet, 10c; oz., 30c; ¼ lb., 90c.

Perpetual Stocks

(Cut-and-Come-Again)

A new and magnificent rage of stocks. The plants are of fine symmetrical habit, 1½ to 2 ft. in height, are very bushy, and produce on numerous branches tall, strong spikes with very large, very double, sweetly scented flowers. A splendid variety to grow in flower beds, borders, or for house plants. Started from seed early in spring in the house and transplanted in the garden in May, the plants will begin to flower in July and continue until frost. They are especially valuable during September and October when other flowers are scarce. If wanted for house plants they should be sown in July or August and will keep in bloom all winter.

PRICE: Large packet, 10c; 3 packets, 25c.



CASH DISCOUNT
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SEEDS IN
PACKETS
50c WORTH
FOR 40c; \$1.00
WORTH FOR
75c; \$2.00 WORTH
FOR \$1.50.

"SURE HATCH" Incubators and Brooders



The seed and poultry business seem to have a natural affinity for each other. In line with numerous inquiries about incubators we are this year offering our trade the Sure Hatch Incubators and Brooders. We have investigated very carefully the merits of these machines, and can truly recommend them to our customers as being first class in every detail.

Pleasure and Profit

Raising chicks is always a pleasure, but is a greater pleasure and more profitable when Sure Hatch machines are used than when raising chickens without this equipment. More little chicks at one hatch and all of one size and age. Just think what it means to bring out 100 or more. It is more satisfactory than to have to bother with ten or a dozen hens that will not hatch any more chicks. You can at once see how you can lighten labor and increase results.

General Construction

The Sure Hatch Incubators

Are made of California Redwood which has been thoroughly demonstrated as the best wood known for such use. This is because Red wood is light, clear, dry, does not shrink, and radiates heat slowly. There are two walls of Redwood with dead air space between them, which space is subdivided by thick straw board.

The method of heating is with hot water, which is the best method for many good reasons. The heating pipes, and heater, are made of pure copper, which radiates heat readily and never rusts. This copper heating system adds many years to the life of the Sure Hatch because the heating system of the average incubator is the first thing to give out. The heating plant is strong enough to assure Sure Hatch users that they can make good hatches in the cold spring weather—just at the time of year to hatch chicks that can be made ready for the most profitable market.

The automatic regulator keeps the temperature at the hatching point of 103 degrees, without the attention of the operator. Set the regulator properly at the beginning of the hatch and very little attention has to be given to it afterwards.

The Sure Hatch has a large roomy nursery under the egg tray. The nursery is supplied with a chick tray for removing the chicks as they hatch. Made in three practical sizes for general use.

The Sure Hatch Incubator is well equipped with conveniences for making it easy to operate. Full directions are sent with every machine. The manufacturers of the Sure Hatch Machines want every one of their customers to succeed at the poultry business, as well as to be successful in operating their machines. With each incubator is sent a free copy of Uncle Sam Poultry Book that gives a lot of valuable instructions on how to win out in the poultry business. This information is in condensed and practicable form.

The Sure Hatch Brooders

Have only a stove and a hover. The stove is cast iron and burns coal thus assuring a constant heat. It has an automatic regulator for keeping the heat uniform. This is quite essential for the rapid growth of young chicks. They should not be overheated nor allowed to get too cold.

The hover is galvanized iron which is hung over the stove throwing the heat on the backs of the chicks in a natural way. Chicks cannot pile up under the canopy. They do not need to crowd each other for the reason that there is plenty of room and an abundance of fresh air.

If further detailed information is desired before you order we will gladly mail a complete catalog devoted to the Sure Hatch Machines.

Our prices f. o. b. shipping point:

Thousands of Sure Hatch Users Are Succeeding

So many thousands are succeeding at hatching chicks with the Sure Hatch Incubator that there is no reason why you cannot do equally as well. These people are not a bit smarter than you are. They were all beginners at one time. A very large per cent of the buyers each year are new beginners. A complete instruction book goes with the Sure Hatch, so that the operator cannot possibly go wrong. The instructions are so plain and simple that boys and girls can run a Sure Hatch; in fact, most incubators are run by women and children.

Keep the Hen Busy Laying

You certainly realize that the time has gone by for hatching chickens with hens. The hen is all right as a layer. Down to this minute we haven't found anything to take her place as a layer. But when it comes to hatching, we've got her badly beaten. She can't spread over enough eggs—in fact, she is too limited in her capacity to meet the ever rapidly growing demand for her products.

Sure Hatch Can Beat the Hen

Right here is where the Sure Hatch Incubator comes in. The work of this machine puts the hen out of business as a hatcher and encourages her as a layer. The entire time of a hen should be given to that she is best suited for—producing eggs.

It is truly marvelous what strong, healthy chicks come out of the Sure Hatch when it has half a chance with good eggs and a little attention.

It is no stretch of imagination to believe that the Sure Hatch Incubator can beat the hen. The hen is a very notionate creature and is not always ready to sit when you are ready to have her. You can't always get your rotations and the hen's notions together, and this is a strong point in favor of the Sure Hatch as against the hen. The machine is always ready to sit any instant you want it, and any place you want it, and it never leaves its job after you set it to work.

Our prices f. o. b. shipping point.

INCUBATORS

No. 100, 100 egg complete	\$24.25
No. 150, 150 egg complete	30.00
No. 200, 200 egg complete	34.25
No. 250, 250 egg complete (large lampbowl)	38.00

BROODERS

No. 5, up to 500 chicks complete	\$19.25
No. 10, up to 1000 chicks complete	24.25

Your orders will have prompt attention.

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SÄVÖ Steel Flower and Plant Box

Made of the best quality of galvanized steel with neat round corners and full roll rim. Watering is easy, drainage ample, air circulation perfect.

The enamel finish both inside and outside prevents rust and leakage. The two perforated arches running the full length of the box, not only hold and distribute water evenly, but supply air to the roots constantly.

For winter and summer use. Fill with water only once a week. Cannot over-water plants. Air goes direct to the roots.

THE SÄVÖ STEEL All-Year-Round Flower Box



Patented Jan. 23, 1917

**Self-Watering and Sub-Irrigating
FOR**

Windows, Porches, Sun Parlors, etc.

Perfect AIR Circulation and Drainage
Leak Proof and Rust Proof

MOST EFFICIENT, DURABLE, ARTISTIC
Six sizes. Beautifully finished

Fill with water only once a week. Move Savo Boxes indoors or out and you can have beautiful Flowers and Plants continually for many years.

AN ALL - YEAR - ROUND - GARDEN

Flowers and Plants are kept healthy and fresh in Savo Boxes the year around as they absorb the exact amount of moisture needed from below. The circulation of air keeps the soil mellow and sweet, making the life and growth of the plants a certainty.

They are beautifully finished in Aluminum or Dark Green, six sizes. The Savo is the most efficient, durable and artistic Flower and Plant Box made. Water only once a week, no surface watering.



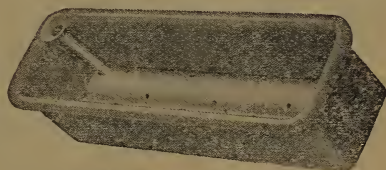
All Year Round Flower Box

Standard Stock Sizes and Price List

Model A, 6 1/2 in. high, 6 1/2 in. wide, 23 in. long	\$3.00
Model B, 8 in. high, 9 1/2 in. wide, 29 in. long	3.50
Model C, 8 in. high, 9 1/2 in. wide, 35 in. long	4.00
Model D, 8 in. high, 9 1/2 in. wide, 41 in. long	4.50
Model E, 8 in. high, 12 in. wide, 12 in. long	3.00
Model F, 12 in. high, 12 in. wide, 12 in. long	3.50

These are outside measurements, including the 1/2-inch roll rim. Special sizes made to order when required.

Beautifully finished in Aluminum or Dark Green.



Models A to D Savo Plant Box

REICHARD'S COMBINATION SPRING-TOOTH Magic Weeder Hoes



Magic Weeder Hoes

The Magic Weeder Hoes have now been before the public for a number of years, during which time many thousands have been annually manufactured and sold, with sales increasing every year. They have received high commendation and approval from many who are thoroughly acquainted with a practical experience with the use of various kinds of weeders, hoes, or hand cultivators, and who place the MAGIC WEEDER HOES ahead of all Garden Tools of this class.

The Handles, which are thoroughly selected, strong, straight-grained stock, are guaranteed not to loosen from the twisted shank, which thoroughly grips the handle like a vise.

The Tines are formed to enter the ground on the order of a plow lifting and pulverizing the soil, loosening and rendering friable, thus subserving moisture, so essential to the rapid growth of young plants.

The Tines are formed of the very best steel that can be obtained for the purpose. They are provided, with an oblique coil near the shank, thus acting independently of the others and making it work very easily, obviating all danger of clogging and breaking.

Style	Length of Handle	Length over all	Diameter of Tines	Width	PRICE, By Mail Postpaid
A	5 1/4"	9 3/4"	5-32"	2"	\$0.40
B	18"	22"	5-32"	2"	.50
C	5 1/4"	10"	5-32"	3"	.60
D	6"	11 1/4"	5-32"	3"	.75
E	6"	11 1/4"	5-32"	3"	.75
F	42"	50"	6-32"	4"	.90
G	48"	57"	8-32"	5"	1.25
H	48"	56"	7-32"	4"	1.60
K	48"	56"	7-32"	4"	1.60

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The following books cover all the different subjects of poultry raising and will be mailed postpaid to your address upon receipt of the price quoted. The long evenings can be advantageously devoted to reading some good poultry book. These books are full of valuable poultry information and will help you plan and carry out your poultry work more successfully and profitably.

Duck Culture

By James Rankin

This is the greatest duck book ever published and every duck breeder everywhere, experienced or beginner should possess a copy of the revised and enlarged sixth edition of Duck Culture. Over 100 pages and fully illustrated. Covers every point in incubating, hatching, breeding, feeding, housing and marketing every variety. Gives Rankin's famous feed formulas. Highly authoritative.

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(THE BRIGGS METHOD)

The latest and greatest help for poultry raisers is the new fifth edition of this book, in which Edgar Briggs, called the Edison of the poultry world, tells his wonderful secrets and how he made \$350 a month from 500 hens. Other subjects the Briggs Method covers are: "Poultry Silage," "Getting Early Hatches," "Raising Late Chicks," "Getting a Large Egg Yield," and numerous other valuable secrets.

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If this book is carefully followed every breeder will start on the road to success. The illustrated book is especially valuable for beginners as it covers every phase of the poultry business in a thorough, practical and condensed manner.

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This book is a compilation of numerous styles of poultry houses and many useful appliances in present use by the most successful breeders, all the result of careful observation and knowledge gained by personal visits. Each house fully illustrated and described. A book of successful, practical plans containing 112 pages.

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All About Indian Runner Ducks

By Mrs. D. O. Teasley and Others

The latest, most practical and reliable book published on the world's greatest egg producers. The author is a breeder of national reputation but she has been assisted by other successful duck breeders with practical experience. Contains separate chapters on the various varieties, giving the relative merits of each, in addition to chapters on care and feeding, housing, breeding, marketing, etc.

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ALL SIX BOOKS TO ONE ADDRESS AT SPECIAL CLUB PRICE OF \$3.50

To Insure Success With Poultry You Need

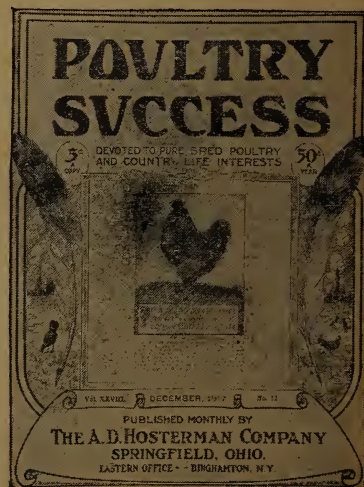
POULTRY SUCCESS

One of the oldest, largest and best national, illustrated monthly magazines published entirely to pure-bred, fancy and utility poultry. One of the old standbys. Instructive and practical articles and departments each issue by the country's best writers covering every phase of the poultry business. For the beginner and backyard fellow, as well as the experienced. The favorite of all breeders, large or small. Edited by Campbell L. Cory and published by the A. D. Hosterman Co., Springfield, Ohio. Subscription price

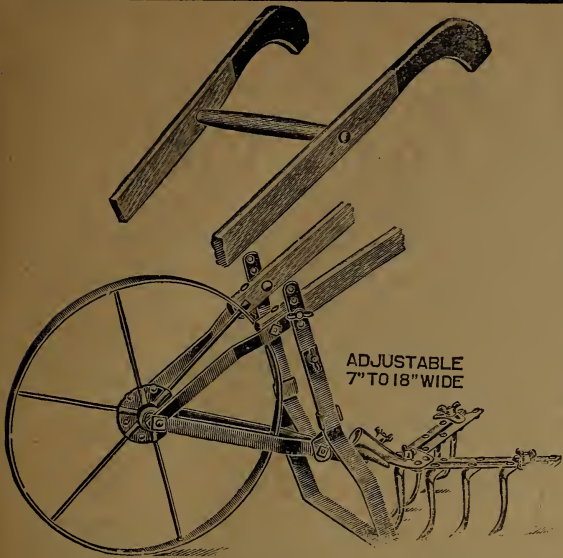
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Formerly Jefferson-Ratekin Seed Co.

ADJUSTABLE
7" TO 18" WIDE

Cultivator Hoe No. PE5

Combines the convenience of the popular five-prong style with the additional advantage of the great PULL-EASY adjustable feature. Teeth are 9 inches long and very broad and strong. These long, grasping teeth will cultivate deeper and more thoroughly than any other garden tool.

Made for husky work in all kinds of soils. At full width of 12 inches is a first-class rake. Adjustable in width from 6 to 12 inches. Tooth points concaved for perfect scouring. Middle tooth removable.

Four-foot straight-grained ash handle, weight 3 pounds. Packed for parcel post shipment, weight 4 pounds.

PRICE: \$1.25 each. Add parcel post charges according to zone rates given on page 3.

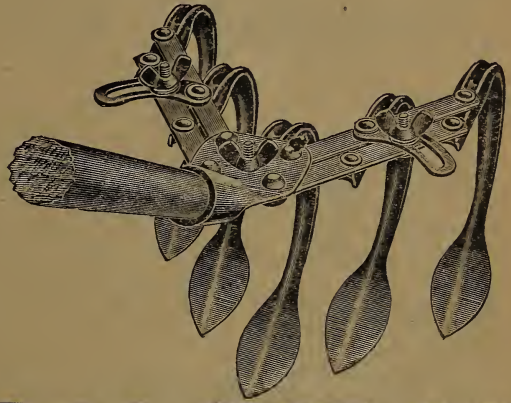
Pull Easy™ Adjustable Garden Cultivators

With the nine-toothed PEC cultivator attached as illustrated (No. PEW2), or with the five-prong PE5 cultivator (No. PEW5).

Also has a keen edged high carbon tool steel weed cutter 9 inches wide. Under most conditions both cultivator and weed cutter can be used at the same time. If the ground is stony or wet, tools can be used separately. The cultivator can be quickly detached, put on a hoe handle and used as a hand tool.

The wheel is 14 inches diameter—plow style maple handles enameled red with black grips. All steel parts royal blue color.

PRICE: \$4.00 each. By parcel post, 13 pounds. Add parcel post charges according to zone rates given on page 3.



Blatchford's Products

Blatchford's Pig Meal

Wean Your Little Pigs
Easily, Safely and Cheaply



Make bigger pigs and bigger profits by weaning and developing your pigs on Blatchford's Pig Meal.

It gives big bone and solid flesh. Prevents loss of growth and vitality during the critical weaning period. Makes the runts catch up. Safe and economical. Sold in 100, 50 and 25-lb. bags.

The outstanding reason for the great popularity of the Blatchford Line of Milk-Substitutes for young animals and poultry is that each of them gives bigger profits, better and quicker results to farmers, dairymen and poultrymen than they can secure from anything else. Always insist on Blatchford's—the name is a Guarantee of Quality—your protection.

Blatchford's

Milk Mash

Shield Your Baby Chicks from
White Diarrhea, Leg Weakness, Bowel Trouble

The one safe, sure, starting and growing feed for baby chicks is Blatchford's Milk Mash.

It combines scientifically every body-building and health-promoting element required by little chicks for rapid and natural development and growth.

Sold in 4-lb. cartons, 25 and 100-lb. bags.



2½ lbs. at
8 weeks!

Blatchford's Calf Meal

A "Baby Food" for Calves

Raise your calves at less cost. The most economical way for you to raise big, healthy calves to early maturity is to feed Blatchford's Calf Meal.

This feed contains all the elements necessary for rapid and healthy growth, and can be fed at half the cost of feeding milk. Calves relish it. Feed it to them from birth. Sold in 100, 50 and 25-lb. bags.

100 pounds makes 100 gallons of Complete Milk-Equal



WRITE FOR LOWEST PRICES

Every Article Offered Carries Our Guarantee

Protect Your Potatoes, Tomatoes, Squashes, Cucumbers, Melons and Cabbages with

BUG DEATH

BAD FOR THE BUGS—GOOD FOR THE CROPS

Insect pests are so numerous, an INSECTICIDE is a necessity if you are to reap results from your careful preparation of soil, planting and cultivating.

BUG DEATH is a fine powder, very tenacious, applied dry or in water for chewing insects. We recommend dry dusting; no drawing water; no mixing solutions. Full directions on each package.

GUARANTEED BY TWENTY YEARS' SUCCESSFUL USE. BUG DEATH CONTAINS NO PARIS GREEN OR ARSENIC to harm plants, bees, birds, or humans, and protection of plants without injury insures highest quality and largest yield. **DON'T WAIT FOR THE BUGS—ORDER WITH YOUR SEEDS AND BE READY FOR THEM—MAILABLE.**

PRICES: Lb. sifter top can, 30c; 3 lbs., 65c; 5 lbs., 90c; 12½ lbs., \$1.75; 100 lbs., \$12. Postage, express or freight extra. Add 1 lb. packing, postage at rates on page 3.



DICKEY DUSTER.
For small plots.
60c, not prepaid.

I have for 18 years relied entirely on BUG DEATH wherever it could be applied, and always in the form of dust. Out of this experience has come the conviction that it feeds the plant, promotes its health, increases crop yield and improves quality of product. This it does by strengthening the life of the stalk and leaf. All the while it is absolutely free from any possibility of injury to birds, bees, users or animals, while always effective in destroying pests.—Dr. G. M. Twitchell in "Maine Farmer," July 3, 1919.



B-D SIFTER.
For Larger Areas.
90c, not prepaid.

BUG DEATH APHIS—A new companion preparation to regular BUG DEATH; for sucking insects; especially for use on fruit trees, berry bushes, grape vines, house plants.
12 oz. sifter top cans, 30c; 80 lbs., \$10.50. Transportation charges as above.

IT STICKS—IT STAYS—KILLS BUGS—AND PAYS



EVEN SPREAD LAWN SPRINKLER

At last! The Sprinkler that every lawn owner has been looking for—the product of a famous inventor—a sensational success. Sprays the water over greater radius than any other; *throws an equal amount on each square foot* with the immense circle, **JUST LIKE RAIN**; elevates it only three to four feet above ground, preventing the wind blowing it to one side, and yet does not cut it into a fine mist to be lost in the air.

A Montana hardware dealer writes: "After trying one out on our lawn it was easy to hand them to our customers on the 'try it first' plan. Had we stocked them earlier in the season, could easily have sold a gross." Another states: "We have sold several dozen of your Even-Spread Lawn Sprinklers and find they do all you claim for them."

Attached to hose, its wonderful little spreader spins like a top, spreading the drops as evenly as a shower, causing all to stop, wonder and admire. Sturdily built, sound in principle, will last a life time. Is truly a little wonder. Customers delighted. Weight, 3 lbs. boxed. We cannot recommend too highly. **PRICE, POSTPAID \$2.75.**

Formerly Jefferson-Ratekin Seed Co.

The Cyclone Seed Sower

A VERY POPULAR SOWER AND VERY EXTENSIVELY SOLD.



This Sower is guaranteed to distribute seed perfectly, evenly, and will not throw seed in an upward direction or against the operator, but directly and evenly to the land. Sows clover, timothy, red top or herd grass, alfalfa, oats, rye, wheat, millet, buckwheat, turnip and other varieties of farm seeds. It also distributes bone dust, land plaster and fertilizer to advantage.

Clover seed is sown a width of 18 feet, timothy 15 feet, alfalfa 20 feet, wheat 25 feet, millet 18 feet, oats 18 feet.

Thus it will be seen that one operator can sow from 40 to 60 acres per day according to the kind of seed.

Full instructions on each machine. This Sower is guaranteed to be satisfactory. You will be pleased with it. Every farmer should have one. Shipping weight 4 pounds.

PRICE: Postpaid, \$2.00 each.

The Horn Seed Sower

This Sower consists of a sack and a sectional tin tube. The sack is made from heavy duck and the Sower is operated by a swinging motion of the tube. It will sow different varieties of farm seed and will do good work. You can get your money back if not pleased with it. Full directions for adjusting and operating on each machine.

PRICE: \$1.00, postpaid.



INSURES SUCCESS WITH LEGUMES

FOR ALFALFA, CLOVERS, VETCHES, COWPEAS, SOY BEANS, PEAS, BEANS

Carries No Weeds or Plant Diseases—Enriches the Soil—Stimulates Growth

"Nitragin" Increases Yield—Makes Fertile Soil

DON'T SOW LEGUME SEED WITHOUT INOCULATION

"Nitragin" is the trade name of a germ that acts on the legume root, drawing nitrogen from the air and converts it into plant food. As a result it insures a uniform "catch" quickly growing a strong, healthy, hardy plant. At the same time the soil is enriched for the nourishment of the succeeding crop. But remember, only Legumes inoculated with a good reliable culture, such as "Nitragin," will do this. Use "Nitragin" on all legumes. Make your farm fertile.

Inoculate Seed with "NITRAGIN" Get a Bumper Crop

In order to get a bumper crop your farm must be fertile. Your farm cannot be fertile unless you can grow Legumes successfully, to get a "catch," to insure an even stand, you must in a great many cases use a good, pure culture, such as "Nitragin." The pure culture

legumes is endorsed by the U. S. Department of Agriculture, by agricultural experts, and by farmers who have used "Nitragin." The leading seed firms through the country are also endorsing pure culture for all legumes. Science has definitely proven that certain crops must find certain bacteria in the soil or they will prove a disappointment or a failure. If you have failed to secure a "catch" it's because there is something lacking in the soil. The problem in a great many cases has been solved, that it lacks bacteria sufficient to insure a "catch." Be sure to state crop for which "Nitragin" is intended.



"NITRAGIN" is shipped to you by mail or express in a ventilated can in a granular medium, in which the germs will live for a long time.

½ acre size (shipping wt. 4 oz.)...\$.50
1 acre size (shipping wt. 8 oz.)... 1.00
2 acre size (shipping wt. 1 lb.)... 1.80

PRICES

5 acre size (shipping wt. 2½ lb.)...\$4.00
10 acre size (shipping wt. 5 lbs.)... 7.50
Postage or express extra.

Be sure to state what crop the "NITRAGIN" is to be used for. You can also get the special GARDEN "NITRAGIN," which is good for Peas, Beans and Sweet Peas, and large enough for the average garden, for 35c postpaid. Simply order: GARDEN "NITRAGIN" —35c, postpaid.

INCLUDE "NITRAGIN" WITH YOUR SEED ORDER—MENTION CROP YOU WANT IT FOR

Plant Dependable "Jefferson Brand" Seeds

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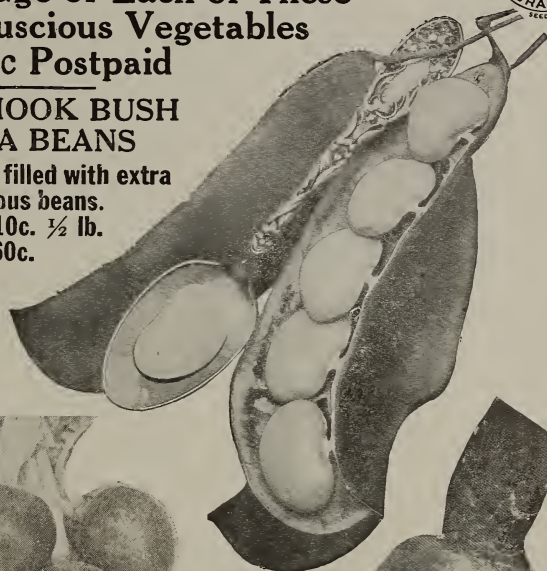


Jefferson's "Big Eight" 1920 Collection

One Large Package of Each of These "Big Eight" Luscious Vegetables for 40c Postpaid

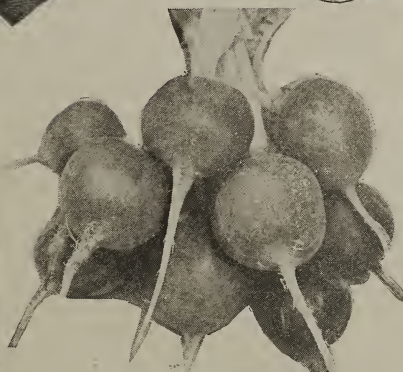
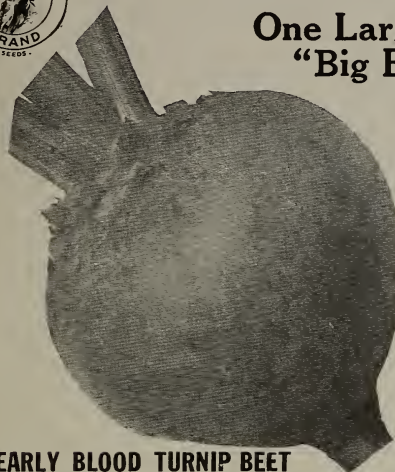
FORDHOOK BUSH LIMA BEANS

Large pods filled with extra
large delicious beans.
Large pkt. 10c. $\frac{1}{2}$ lb.
35c. 1 lb. 60c.
postpaid.



EARLY BLOOD TURNIP BEET

The Earliest and Best Beet Ever Grown
Large pkt. 5c. Oz. 20c. $\frac{1}{4}$ lb. 50c. lb. \$1.50
Postpaid.



LITTLE RED WONDER RADISH

The earliest scarlet turnip radish.
Large pkt. 5c. Oz. 20c, $\frac{1}{4}$ lb. 50c, $\frac{1}{2}$ lb.
90c, lb. \$1.50. Postpaid.

COUNTRY GENTLEMAN SWEET CORN

The old time "Shoe
Peg." Extremely sweet
and delicious. Large
pkt. 5c, $\frac{1}{4}$ lb. 15c, $\frac{1}{2}$ lb.
25c, 1 lb. 40c. Postpaid.



CHANTENAY CARROT

Most desirable
early variety for
bunching. Large
pkt. 5c, Oz. 20c,
 $\frac{1}{4}$ lb. 50c, lb. \$1.50.
Postpaid.



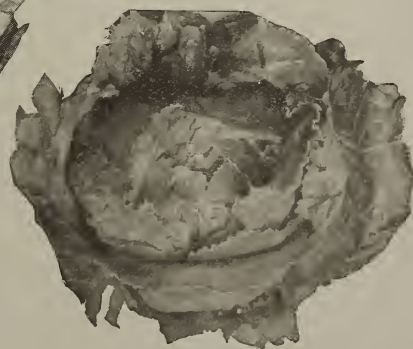
"NEW PARDE" TOMATO

The largest early Tomato ever
introduced. Regular shape, solid
meaty flesh. Large pkt. 10c, Oz.
50c, $\frac{1}{4}$ lb. \$1.50, $\frac{1}{2}$ lb. \$2.75, lb.
\$5.00. Postpaid.



JEFFERSON'S NEW SWISS CHARD

Silver Ribbed, better for greens
than Spinach. Large pkt. 5c, Oz.
20c, $\frac{1}{4}$ lb. 50c, lb. \$1.75 Postpaid.



IMPROVED HANSON HEAD LETTUCE

The most reliable, sure-heading
sort. Leaves large and broad, crisp
and sweet. Large pkt. 5c, Oz. 20c,
 $\frac{1}{4}$ lb. 50c, lb. \$1.50. Postpaid.

IOWA SEED CORN

Grown in the real Heart of the Corn Belt



**Diamond Joe's
Big Early White**

LARGEST EARED, BIGGEST
YIELDING, EARLIEST
MATURING VARIETY OF
WHITE CORN IN EXISTENCE

PECK \$1.75 - 1/2 BUSHEL \$3.00
BUSHEL \$5.00

JEFFERSON



SEED COMPANY

JEFFERSON

IOWA